96-156

FISCAL YEAR 1981 AUTHORIZATION FOR THE DEPARTMENT OF ENERGY AND THE FEDERAL ENERGY REGULATORY COMMISSION

HEARINGS

BEFORE THE

SUBCOMMITTEE ON ENERGY AND POWER

OF THE

COMMITTEE ON

INTERSTATE AND FOREIGN COMMERCE

HOUSE OF REPRESENTATIVES

NINETY-SIXTH CONGRESS

SECOND SESSION

ON

H.R. 6627

A BILL TO AUTHORIZE APPROPRIATIONS TO THE DEPARTMENT OF ENERGY FOR CIVILIAN PROGRAMS FOR FISCAL YEAR 1981 AND FISCAL YEAR 1982, AND FOR OTHER PURPOSES

FEBRUARY 8, 11, 12, 13, 20, AND 29, 1980

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FISCAL YEAR 1981 AUTHORIZATION FOR THE DEPARTMENT OF ENERGY AND THE FEDERAL ENERGY REGULATORY COMMISSION

FRIDAY, FEBRUARY 8, 1980

House of Representatives,
Subcommittee on Energy and Power,
Committee on Interstate and Foreign Commerce,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10 a.m., in room 2123, Rayburn House Office Building, Hon. John D. Dingell, chairman, presiding.

Mr. Dingell. The subcommittee will come to order.

Today, the subcommittee commences its consideration of the Department of Energy's budget request for fiscal year 1981. The past year has dramatized the importance of our Nation's energy programs. The success of these programs is as important to our national security as our national defense programs. Energy is at the root of last year's double-digit inflation.

The purpose of the authorization process is twofold: First, to insure that adequate funds are provided to carry out the mandates of our energy laws; and, second, to insure that the programs are being managed properly. The oversight aspect of this process is as important as the legislative aspect.

This subcommittee has jurisdiction over only a portion of the Department's budget. This portion is important, though, because it relates to our current energy situation. In conservation, the Nation will continue several important grant programs, such as weatherization assistance for schools, hospitals, governmental buildings, and low-income residences. In emergency preparedness, the Nation must provide funds for readying a gasoline rationing program.

We will also be reviewing the largest single budget item—the strategic petroleum reserve—to determine what sums are required and to make sure the funds are spent prudently. On the regulatory side, we will review the implementation of new laws, such as the Fuel Use Act and the Natural Gas Policy Act.

The Chair intends to insure that the will of the Congress expressed in those laws is carried out. I also intend to review the Department's enforcement program. Audits of oil companies have uncovered billions of dollars in potential overcharges, and it is the intention of the subcommittee to see that the Department devotes sufficient resources to recover these illegal gains.

It is also the will of the subcommittee that the prosecution of these matters by the Department of Justice be properly done and appropriate cooperation be extended the Department of Energy on this matter by the Department of Justice, something which appears from last year's hearings to be sadly missing.

Last year, the subcommittee conducted extensive investigations into the overuse and misuse of contractors. The subcommittee has consistently been unsatisfied with the fact that the contractors are used for what appear to be governmental or perhaps regulatory functions by the Department, and the Chair is not fully satisfied that improvements are being made to alter these practices and to prevent taxpayers' dollars from being wasted on unnecessary and mismanaged contracts. The subcommittee will again review these matters and expect improvements as the year goes forward.

[Testimony begins on p. 30.]

[The text of H.R. 6627, which was introduced subsequent to the hearing, and a Department of Energy report thereon, follow:]

96TH CONGRESS
2D SESSION

H.R. 6627

To authorize appropriations to the Department of Energy for civilian programs for fiscal year 1981 and fiscal year 1982, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 26, 1980

Mr. STAGGERS (for himself, Mr. UDALL, and Mr. FUQUA) (by request) introduced the following bill; which was divided and referred as follows: Title I to the Committee on Science and Technology; Titles II and III to the Committee on Interstate and Foreign Commerce; Title IV to the Committee on Interior and Insular Affairs; Title V concurrently to the Committees on Interior and Insular Affairs and Interstate and Foreign Commerce; Title VI concurrently to the Committees on Interstate and Foreign Commerce and Science and Technology; and Titles VII and VIII concurrently to the Committees on Foreign Affairs, Interior and Insular Affairs, Interstate and Foreign Commerce, and Science and Technology

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A BILL

To authorize appropriations to the Department of Energy for civilian programs for fiscal year 1981 and fiscal year 1982, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Department of Energy

Authorization Act for Fiscal Years 1981 and 1982—Civilian Applications".

TITLE I—RESEARCH AND DEVELOPMENT

SEC. 101. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for operating and capital equipment expenses for the following fossil fuel programs:

(A) Coal, $597,071,000;

(B) Petroleum, $63,758,000; and

(C) Enhanced gas recovery, $30,821,000.

SEC. 102. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for fossil energy construction relating to coal, including planning, construction, acquisition, or modification of facilities, including land acquisition, as follows:

(A) Project 81-T-401, renovation of South Wing, Building 3, Bartlesville Energy Technology Center, Oklahoma, $1,200,000;

(B) Project 81-T-402, surplus water containment and waste water treatment facility, Pittsburgh Energy Technology Center, Pennsylvania, $1,300,000;

(C) Project 81-T-404, general plant projects, six locations, $6,000,000;

(D) Project 80-FE-3, program support facility, Pittsburgh Energy Technology Center, Pennsylvania, an additional sum of $7,800,000 for a total project authorization of $9,500,000;

(E) Project 80-FE-10, atmospheric fluidized bed combustion component test and integration unit, Morgantown, West Virginia, an additional sum of $9,935,000, for a total project authorization of $49,795,000;

(F) Project 80-FE-11, pressurized fluidized bed combined cycle pilot plant, Woodridge, New Jersey, an additional sum of $9,200,000 for a total project authorization of $39,000,000;

(G) Project 79-1-R, SRC-II (Liquids) Demonstration Plant, West Virginia, an additional sum of $210,000,000 for a total project authorization of $300,000,000;

(H) Project 78-2-D, SRC-I (Solids) Demonstration Plant, Kentucky, an additional sum of $195,000,000, for a total project authorization of $275,000,000; and

(I) Project 76-1-B, high Btu synthetic pipeline gas demonstration plant, Noble County, Ohio and Perry County, Illinois, an additional sum of

$193,000,000 for a total project authorization of $275,000,000.

Sec. 103. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for operating expenses for the following supply research and development programs:

(A) Solar applications, $130,286,000;

(B) Solar technology, $414,500,000;

(C) Geothermal, $131,179,000;

(D) Nuclear fission, $618,847,000;

(E) Magnetic fusion, $286,117,000;

(F) Electric energy systems, $38,423,000;

(G) Energy storage systems, $70,100,000;

(H) Hydropower, $8,211,000;

(I) Environment, $240,954,000; and

(J) Supporting research, $274,085,000.

Sec. 104. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for supply research and development plant and capital equipment, including planning, construction, acquisition, or modification of facilities, including land acquisition; and acquisition and fabrication of capital equipment not related to construction, as follows:

(A) Solar applications capital equipment not related to construction, $2,500,000;

(B) Solar Technology:

(1) Project 81-T-305, ethanol from biomass production/conversion system, location to be determined, $2,500,000;

(2) Project 81-T-306, solar industrial cogeneration project, location to be determined, $1,900,000;

(3) Project 80-B-1, biomass thermochemical gasification experimental facility, site to be determined, an additional sum of $2,000,000, for a total project authorization of $4,000,000;

(4) Project 80-ES-2, Shenandoah solar total energy project, Shenandoah, Georgia, an additional sum of $5,800,000, for a total project authorization of $16,400,000;

(5) Project 80-ES-19, small community solar thermal power experiment, location to be determined, an additional sum of $3,750,000, for a total project authorization of $7,545,000;

(6) Project 79-1-Q, Solar Energy Research Institute facility, Golden, Colorado, an additional sum of $10,000,000, for a total project authorization of $19,900,000;

(7) Project 76–2–B, ten megawatt central receiver solar thermal powerplant, Barstow, California, an additional sum of $10,000,000, for a total project authorization of $118,000,000; and

(8) Solar technology capital equipment not related to construction, $14,050,000.

(C) Geothermal:

(1) Project 80–G–1, geothermal demonstration powerplant project, Valles Caldera, New Mexico, an additional sum of $10,911,000, for a total project authorization of $50,340,000; and

(2) Geothermal capital equipment not related to construction, $1,310,000.

(D) Nuclear Fission:

(1) Project 81–T–301, general plant projects, $2,000,000;

(2) Project 81–T–302, salt test facility, site undetermined, $6,800,000;

(3) Project 81–T–310, general plant projects, $11,500,000;

(4) Project 80–ES–12, near surface test facility, phase II (nuclear waste), Richland, Washington, an additional sum of $3,576,000, for a total project authorization of $11,850,000;

(5) Project 79-1-e, security and safeguards improvements, Richland, Washington, an additional sum of $3,000,000, for a total project authorization of $12,000,000;

(6) Project 78-6-F, fuels and materials examination facility, Richland, Washington, an additional sum of $52,000,000, for a total project authorization of $135,200,000; and

(7) Nuclear fission capital equipment not related to construction, $30,410,000.

(E) Magnetic Fusion:

(1) Project 81-T-313, general plant projects, $5,400,000;

(2) Project 80-MF-3, Elmo bumpy torus proof of principal, location to be determined, an additional sum of $34,900,000, for a total project authorization of $44,000,000;

(3) Project 80-MF-4, large coil test facility, Oak Ridge, Tennessee, an additional sum of $6,690,000, for a total project authorization of $16,950,000;

(4) Project 78-3-B, fusion materials irradiation test facility, Richland, Washington, an additional sum of $79,850,000, for a total project authorization of $104,250,000;

(5) Project 76-5-A, Tokamak fusion test reactor, Princeton Plasma Physics Laboratory, Plainsboro, New Jersey, an additional sum of $45,000,000, for a total project authorization of $283,600,000; and

(6) Magnetic fusion capital equipment not related to construction, $38,100,000.

(F) Electric energy systems capital equipment not related to construction, $1,500,000.

(G) Energy storage systems capital equipment not related to construction, $1,700,000.

(H) Environment:

(1) Project 81-E-305, general plant projects, $3,000,000;

(2) Project 81-E-306, modifications and additions to biomedical and environmental research facilities, various locations, $3,400,000; and

(3) Environment capital equipment not related to construction, $13,740,000.

(I) Supporting Research:

(1) Project 81-E-301, general plant projects, $300,000;

(2) Project 81-E-304, accelerator improvements and modifications, Oak Ridge National Laboratory, Oak Ridge, Tennessee, $200,000;

(3) Project 81–E–308, energy systems research laboratory (ESRL), Oak Ridge National Laboratory, Oak Ridge, Tennessee, $2,000,000;

(4) Project 81–E–309, rehabilitation of general purpose physical plant, Argonne, Illinois, $15,100,000;

(5) Project 81–E–310, transmission and distribution systems upgrading, Richland, Washington, $12,000,000;

(6) Project 81–E–311, energy science and technology building expansion, Brookhaven National Laboratory, New York, $12,000,000;

(7) Project 81–E–312, environment and energy technology facility, Richland, Washington, $18,000,000;

(8) Project 81–E–313, central energy conservation facility, Brookhaven National Laboratory, New York, $9,100,000;

(9) Project 81–E–314, energy utilization improvements, Brookhaven National Laboratory, New York, $2,000,000;

(10) Project 81–E–315, centralized cogeneration with chilled and hot water distribution, Argonne National Laboratory, Illinois, $7,400,000;

(11) Project 81-E-316, boiler numbered 3 replacement, Brookhaven National Laboratory, New York, $3,000,000;

(12) Project 81-E-317, roof replacement, Idaho National Engineering Laboratory, Idaho, $5,300,000;

(13) Project 81-E-318, upgrade primary substation, Oak Ridge, National Laboratory, Oak Ridge, Tennessee, $3,500,000;

(14) Project 81-E-319, install coal-fired atmospheric fluidized-bed boiler, Argonne National Laboratory, Illinois, $7,100,000;

(15) Project 81-E-320, central supply facility, Argonne National Laboratory, Illinois, $8,500,000;

(16) Project 81-E-321, site utilities project, Ernest Orlando Lawrence Livermore National Laboratory, California, $7,900,000;

(17) Project 81-E-322, Scoville substation distribution system upgrade, Idaho National Engineering Laboratory, Idaho, $1,000,000;

(18) Project 81-E-323, fire safety improvements, Argonne National Laboratory, Illinois, and Idaho National Engineering Laboratory, Idaho, $4,100,000;

(19) Project 81–E–324, fire safety and protection improvements, Idaho National Engineering Laboratory, Idaho, $3,400,000;

(20) Project 80–ES–10, chemical and materials sciences laboratory, Lawrence Berkeley Laboratory, California, an additional sum of $6,300,000, for a total project authorization of $12,600,000; and

(21) Support research capital equipment not related to construction, $16,500,000.

SEC. 105. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for operating expenses and capital equipment not related to construction for the following conservation research and development programs:

(A) Buildings and community systems, $64,225,000;

(B) Industrial energy conservation, $54,400,000;

(C) Transportation, $64,200,000; and

(D) Multi-Sector, $15,100,000.

SEC. 106. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for operating expenses for the following general science and research programs:

(A) Life sciences research and nuclear medicine applications, $45,650,000;

(B) High energy physics, $242,245,000; and

(C) Nuclear physics, $88,800,000.

SEC. 107. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for general science and research plant and capital equipment, including planning, construction, acquisition, or modification of facilities, including land acquisition; and acquisition and fabrication of capital equipment not related to construction, as follows:

(A) Life sciences research and nuclear medicine applications capital equipment not related to construction, $2,900,000;

(B) High Energy Physics:

(1) Project 81-E-218, Tevatron, Phase I, Fermi National Accelerator Laboratory, Illinois, $39,500,000;

(2) Project 81-E-219, accelerator improvements and modifications, various locations, $6,000,000;

(3) Project 81–E–220, general plant projects, $5,000,000;

(4) Project 79–9–B, energy saver, Fermi National Accelerator Laboratory, Batavia, Illinois, an additional sum of $19,600,000, for a total project authorization of $46,600,000;

(5) Project 78–10–B, intersecting storage accelerator (ISABELLE) 400x400 GeV, Brookhaven National Laboratory, Upton, New York, an additional sum of $196,500,000, for a total project authorization of $275,000,000; and

(6) High energy physics capital equipment not related to construction, $39,000,000.

(C) Nuclear Physics:

(1) Project 81–E–221, accelerator improvements and modifications, various locations, $1,600,000;

(2) Project 81–E–222, general plant projects, $2,800,000;

(3) Project 81–E–223, Argonne tandem-linac accelerator system, Argonne National Laboratory, Illinois, $6,900,000;

(4) Project 80–GS–5, National Superconducting Cyclotron Laboratory, Michigan State University, East Lansing, Michigan, an additional

sum of $24,000,000, for a total project authorization of $30,000,000; and

(5) Nuclear physics capital equipment not related to construction, $9,400,000.

SEC. 108. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for operating expenses for the uranium enrichment program, as follows:

(A) Uranium enrichment activities—process development operating expenses, $78,500,000; and

(B) Advanced isotope separation technology, $67,299,000.

SEC. 109. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for the uranium enrichment plant and capital equipment, including planning, construction, acquisition, or modification of facilities, including land acquisition, and acquisition and fabrication of capital equipment not related to construction as follows:

(A) Project 81–T–501, isotope research and development laboratory, New Mexico, $16,000,000;

(B) Project 81–T–502, advanced isotope separation laboratory, Ernest Orlando Lawrence Livermore National Laboratory, California, $29,700,000;

(C) Project 81-T-504, general plant projects, $2,970,000;

(D) Project 76-8-G, enriched uranium production facilities, Portsmouth, Ohio, an additional sum of $286,325,000, for a total project authorization of $1,121,630,000; and

(E) Uranium enrichment capital equipment not related to construction, $12,300,000.

SEC. 110. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for expenses of the geothermal resources development fund as follows:

(A) Geothermal resources development fund, $1,284,000.

TITLE II—COMMERCIALIZATION AND RELATED ACTIVITIES

SEC. 201. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for expenses for the following commercialization and related activities programs:

(A) Renewable Resources—Expenses:

(1) Solar planning, demonstration, and distribution, $10,040,000;

(2) Solar information systems, $1,400,000;

(3) Hydrothermal commercialization, $10,000,000;

(4) Hydropower, $10,789,000; and

(5) Multiresource, $1,036,000.

(B) Conservation Activities—Expenses:

(1) Buildings and community systems, $11,575,000;

(2) Transportation, $6,700,000;

(3) State and local, $416,959,000: *Provided*, That not more than 25 per centum of funds appropriated for the schools and hospitals grant program in fiscal year 1981 may be used for purposes of technical assistance;

(4) Energy information campaign, $50,000,000; and

(5) Energy impact assistance, $150,000,000.

TITLE III—REGULATORY AND RELATED FUNCTIONS

SEC. 301. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for economic regulation as follows:

(A) to the Economic Regulatory Administration for expenses, $153,621,000; and

(B) to the Office of Hearings and Appeals for expenses, $8,850,000.

Sec. 302. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for expenses for the Federal Energy Regulatory Commission as follows:

(A) Federal Energy Regulatory Commission expenses, $76,374,000.

Sec. 303. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for expenses for the following energy information program:

(A) Energy information expenses, $107,420,000.

Sec. 304. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for expenses for the following strategic petroleum reserves program:

(A) Strategic petroleum reserve expenses, $103,978,000.

TITLE IV—POWER MARKETING AND FEDERAL LEASING

Sec. 401. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for expenses for the following power marketing programs:

(A) Alaska Power Administration, including expenses for engineering and economic investigation to promote the development and utilization of the water, power, and related resources of Alaska, $3,069,000;

(B) Southeastern Power Administration, including continuing fund, $1,552,000;

(C) Southwestern Power Administration, including continuing fund, $28,208,000;

(D) Western Area Power Administration, for construction, rehabilitation, operation, and maintenance of electric power transmission facilities, and power marketing activities, $138,502,000 of which $124,200,000 shall be derived from the Department of Interior reclamation fund;

(E) Western Area Power Administration, for the emergency fund established pursuant to the Act of June 26, 1948 (43 U.S.C. 502), to assure continuous operations during unusual or emergency conditions, $200,000, all of which shall be derived from the reclamation fund; and

(F) Western Area Power Administration, for continued work on the transmission system of the Upper Colorado River storage project, authorized by section 1(1) of the Act of April 11, 1956 (Public Law 84-485) and legislation supplementary thereto, including the

Act of August 10, 1972 (Public Law 92-370), $3,548,000.

Sec. 402. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for expenses for the following Federal leasing and fuel data gathering and analysis programs:

(A) Federal leasing expenses, $3,300,000; and

(B) Fuel data gathering and analysis expenses, $8,803,000.

TITLE V—NUCLEAR ASSESSMENT, SPENT NUCLEAR FUEL STORAGE AND COMMERCIAL WASTE REMEDIAL ACTION

Sec. 501. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for operating expenses for the following uranium resource assessment program:

(A) Uranium resource assessment operating expenses, $34,455,000.

Sec. 502. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for uranium resource assessment plant and capital equipment, including planning, construction, acquisition, or modification of facilities, including land acquisition; and acquisition and fabrication of capital equipment not related to construction, as follows:

(A) Project 81-R-501, general plant projects, $800,000; and

(B) Uranium resource assessment—capital equipment not related to construction, $500,000.

SEC. 503. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for operating expenses for the spent nuclear fuel storage and remedial action programs as follows:

(A) Spent nuclear fuel storage expenses, $19,513,000; and

(B) Commercial nuclear waste remedial action expenses, $52,000,000.

SEC. 504. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for spent nuclear fuel storage and remedial action programs capital equipment not related to construction, $2,550,000.

TITLE VI—OTHER FOSSIL ENERGY, SOLAR ENERGY, AND CONSERVATION ACTIVITIES

SEC. 601. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for expenses for the other fossil energy, solar energy, and conservation activities programs as follows:

(A) Fossil energy—Expenses:

(1) Coal, $6,191,000;

(2) Oil and gas development, $8,345,000; and

(3) Executive direction, $551,000.

(B) Solar energy—Expenses:

(1) Market development and training, $39,500,000; and

(2) Solar international applications, $4,000,000.

(C) Conservation activities—Expenses:

(1) Buildings and community systems, $16,800,000;

(2) Industrial energy conservation, $4,500,000;

(3) Energy Management Partnership Act, $151,625,000; and

(4) Multisector, $14,100,000.

TITLE VII—OTHER DEPARTMENTAL ACTIVITIES

Sec. 701. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for operating expenses for the following uranium enrichment activities programs:

(A) Gaseous diffusion operations and support, $825,926,000;

(B) Gas centrifuge operations and support, $800,000; and

(C) Program direction, $3,060,000.

SEC. 702. Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for uranium enrichment activities plant and capital equipment, including planning, construction, acquisition, or modification of facilities, including land acquisition; and acquisition and fabrication of capital equipment not related to construction as follows:

(A) Uranium enrichment activities—Plant and capital equipment:

(1) Project 81-R-501, general plant projects, $17,500,000;

(2) Project 81-R-502, UF-6 cylinders and storage yards, gaseous diffusion plants, $8,000,000;

(3) Project 81-R-503, utilities upgrading, gaseous diffusion plants, $27,000,000;

(4) Project 81-R-504, supervisory control and data acquisition systems, Paducah, Kentucky, and Portsmouth, Ohio, gaseous diffusion plants, $13,000,000;

(5) Project 81-R-505, instrumentation for purge cascades and withdrawal areas, gaseous diffusion plants, $6,000,000;

(6) Project 81-R-506, environmental protection and safety modifications, phase I, gaseous diffusion plants, $55,000,000;

(7) Project 80-UE-1, control of gaseous diffusion effluents, gaseous diffusion plants, Oak Ridge, Tennessee, and Paducah, Kentucky, an additional sum of $4,700,000, for a total project authorization of $7,000,000;

(8) Project 80-UE-2, control of water pollution, gaseous diffusion plants, an additional sum of $9,500,000, for a total project authorization of $17,000,000;

(9) Project 80-UE-3, plant facilities security improvements, gaseous diffusion plants, an additional sum of $12,500,000, for a total project authorization of $17,000,000;

(10) Project 80-UE-4, power recovery demonstration cells, gaseous diffusion plants, an addi-

tional sum of $7,000,000, for a total project authorization of $10,500,000;

(11) Project 80–UE–5, motor and switchgear upgrading, gaseous diffusion plants, an additional sum of $20,600,000, for a total project authorization of $28,500,000; and

(12) Uranium enrichment activities capital equipment not related to construction, $24,000,000.

SEC. 703. (a) Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for operating expenses for departmental administrative activities programs as follows:

(A) Policy analysis and systems studies, $19,600,000;

(B) International affairs, $5,100,000;

(C) Management and support, $287,665,000;

(D) Intergovernmental and institutional relations, $36,743,000;

(E) In-house energy management, $3,900,000;

(F) Security investigations, $17,012,000; and

(G) Other supporting activities, cost of work for others, and changes in inventories, $55,803,000.

(b) Funds are hereby authorized to be appropriated for fiscal year 1981 in accordance with section 660 of the Department of Energy Organization Act for departmental administrative activities plant and capital equipment, including planning, construction, acquisition, or modification of facilities, including land acquisition; and acquisition and fabrication of capital equipment not related to construction, as follows:

(A) Project 81-A-601, modifications for energy management, various locations, $28,200,000;

(B) Project 81-C-601, plant engineering and design, $9,000,000;

(C) Project 81-A-602, energy monitoring and control system, Y-12 plant, Oak Ridge, Tennessee, $5,000,000;

(D) Project 81-A-603, energy monitoring and control system, Oak Ridge National Laboratory, Tennessee, $4,000,000;

(E) Project 81-A-604, HVAC heat recovery and night setback, Richland, Washington, $3,000,000;

(F) Project 81-A-605, automated energy management system, Argonne National Laboratory, Illinois, $3,800,000;

(G) Project 80-DA-6, alternate energy source, Pantex plant, Texas, an additional sum of

$43,300,000, for a total project authorization of $46,600,000; and

(H) Departmental administration capital equipment not related to construction, $5,165,000.

TITLE VIII—AUTHORIZATION OF APPROPRIATIONS FOR FISCAL YEAR 1982

SEC. 801. There is authorized to be appropriated to the Department of Energy to be available no earlier than October 1, 1981, such sums as may be necessary for fiscal year 1982 for programs set forth in this Act.

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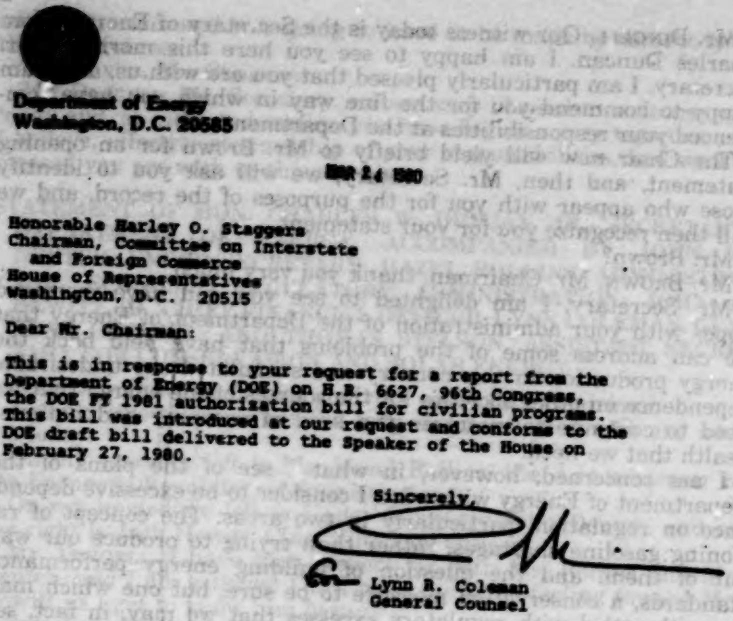

Department of Energy
Washington, D.C. 20585

MAR 24 1980

Honorable Harley O. Staggers
Chairman, Committee on Interstate
and Foreign Commerce
House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

This is in response to your request for a report from the Department of Energy (DOE) on H.R. 6627, 96th Congress, the DOE FY 1981 authorization bill for civilian programs. This bill was introduced at our request and conforms to the DOE draft bill delivered to the Speaker of the House on February 27, 1980.

Sincerely,

Lynn R. Coleman
General Counsel

Mr. DINGELL. Our witness today is the Secretary of Energy, Hon. Charles Duncan. I am happy to see you here this morning, Mr. Secretary. I am particularly pleased that you are with us, and I am happy to commend you for the fine way in which you have commenced your responsibilities at the Department.

The Chair now will yield briefly to Mr. Brown for an opening statement, and then, Mr. Secretary, we will ask you to identify those who appear with you for the purposes of the record, and we will then recognize you for your statement.

Mr. Brown?

Mr. BROWN. Mr. Chairman, thank you very much.

Mr. Secretary, I am delighted to see you and have increased hopes with your administration of the Department of Energy that we can address some of the problems that have held back the energy production in this country and stimulated our undesirable dependence on other societies for the sources of the energy that we need to continue to maintain the kind of economy and national health that we need.

I am concerned, however, in what I see of the plans of the Department of Energy with what I consider to be excessive dependence on regulation, particularly in two areas: The concept of rationing gasoline shortages, rather than trying to produce our way out of them, and the question of building energy performance standards, a conservation measure to be sure, but one which may be so throttled with regulatory excesses that we may, in fact, set back the kind of progress that has already been made as a result of the natural inclinations of people in the American economy to go ahead and make savings of their own.

I, too, am concerned about the strategic petroleum reserve and the fact over the last several years we have not kept close to the schedule we once set out for ourselves so we might have energy independence in the case of a shutoff, at least for a period of time.

I think we are neglecting still to deal with the question that was created for us with the passage of the National Gas Policy Act, and that is a multitier price for natural gas which is in the pattern of the two-tier price we have had on oil for a number of years, which the President has been wise enough to try to get out of. It seems to me that the multitier pricing concept of natural gas is going to lead us to the same problems we have as a result of oil pricing. We will be dependent on controls and subsidization, on the one hand, and maintain unrealistic concepts of the market on the other.

Finally, I am distressed that the President is actually reducing his budget for nuclear power and nuclear power problems. I think, instead, we ought to be looking at nuclear power as one of the real options that we have as a result of the problems that we face in the Near East with our oil supply.

I also feel that we have not properly addressed the inconsistency between the policy of stimulating the use of coal and the discouragement of its use through environmental constraints. I would hope that in the future, when you have been in the saddle a little longer in the Department of Energy, you will have a chance to address that problem with some degree of aggressiveness because obviously the resolution of that problem has not been made in this administration, and it is going to have to be made by somebody in the near future.

Thank you, Mr. Chairman.

Mr. DINGELL. Mr. Secretary, we are very pleased to welcome you today and, as indicated earlier, you have begun a very vigorous and I believe, effective stewardship of your responsibilities, and we are pleased you are with us this morning.

STATEMENT OF HON. CHARLES W. DUNCAN, JR., SECRETARY, DEPARTMENT OF ENERGY, ACCOMPANIED BY JOHN M. DEUTCH, UNDER SECRETARY; HAZEL ROLLINS, ADMINISTRATOR, ECONOMIC REGULATORY ADMINISTRATION; JOHN A. HEWITT, JR., CHIEF FINANCIAL OFFICER; LYNN COLEMAN, GENERAL COUNSEL; AND THOMAS STELSON, ASSISTANT SECRETARY FOR CONSERVATION AND SOLAR ENERGY

Secretary DUNCAN. Thank you very much, Mr. Chairman.

I would like to introduce the lady and gentlemen who are with me today.

On my extreme left is Ms. Hazel Rollins, the Administrator of the Economic Regulatory Administration.

On my immediate left is Under Secretary John Deutch, and on my right is Jack Hewitt, Chief Financial Officer.

Mr. DINGELL. I have high respect for both Ms. Rollins and Mr. Deutch, and I am satisfied I will have the same feeling toward Mr. Hewitt as I get to know him better.

Secretary DUNCAN. Mr. Chairman, I have submitted a rather lengthy statement from the Department of Energy to this committee, which I will only summarize very briefly.

Mr. DINGELL. Without objection, your full statement will appear in the record [see p. 35], and we will recognize you for such summary as you choose to give.

Secretary DUNCAN. The past year, as you all know, has been dominated by turmoil in the world oil market. I won't go through a recitation of those events, because you are adequately familiar with them.

The worldwide balance between supply and demand for liquid petroleum remains very fragile. Continued reliance on imports for nearly half our current petroleum requirements is becoming a very significant economic and national security problem, especially in the light of recent international events.

For too long we have faced one energy crisis after another. We may have to face more such crises before we complete our transition from an economy that is so heavily dependent on oil to one I have begun to call an energy-diversified economy.

This transition will be a long process, probably taking as long as 20 years to achieve energy diversification. This transition requires a recognition that there are no shortcuts, there are no technological miracles, there are no quick solutions which are going to make this necessary transition significantly shorter or any less demanding.

We have no option but to proceed with the tremendous challenge, the most serious one we have ever faced in peacetime, in my judgment, to manage this transition well or have it manage us in an adverse way.

There is no question, unfortunately, that higher prices and limited supplies are going to change permanently the way we utilize energy. During the next 5 years, the world will have to continue to rely heavily on oil. The most readily available and economical source of energy for this short-term period is conservation.

We will have to do what we can to increase supplies of natural gas, coal, uranium, certain renewable resources in this period in addition to conservation that will help reduce dependence on oil.

When you look at the mid-term period which I have arbitrarily defined as 1985 to the year 2000, I think we can foresee that the world will move away from dependence on oil toward energy systems that rely on coal and coal-derived synthetics, solar technologies, oil shale, more unconventional gas, and nuclear power.

Continued improvements in the efficiency of energy use will continue to be required and should receive a high priority during this period as well.

As we move beyond the year 2000, I think we can see a further move toward more sophisticated renewable energy resources and more advanced nuclear technologies.

Balanced emphasis is given in this budget to both reduction in the demand for energy and efforts to expand available supplies of energy. Over the long term, we have to emphasize both sides of this equation, supply and demand, not one instead of the other, not one in lieu of the other, not one with higher priority over the other. It is very important that we focus on both.

At times I am confronted with questions which indicate there is choice. I think there is no choice. We have to emphasize supplies, and we also have to constrain demand.

We are asking for total budget authority of $12.6 billion. This represents an increase of 8 percent over fiscal year 1980. We are asking for an increase in budget outlays of about 12 percent. We are asking for over $1 billion for conservation activities, and this expenditure will be augmented by an estimated $739 million in tax credits. Direct Federal grants to State and local governments that total $569 million in budget authority are being requested, and that request represents an increase of 25 percent over 1980 levels.

We are asking funding for weatherization assistance for low-income, elderly, and handicapped persons who live in older, less energy-efficient housing; and the Energy Management Partnership Act to broaden the State and local energy management capabilities and to consolidate several existing grant programs and the Energy Extension Service into a core program for conservation activities.

We are asking for energy audits and energy conservation measures in schools and hospitals throughout the nation. Other things we are doing include a new public information campaign that emphasizes the efficient use of energy in homes and for personal transportation.

Of course, we have the ongoing decontrol of crude oil, the President's statement respecting limitations on oil imports, and ongoing contingency planning efforts designed to meet any supply interruption.

The 1981 budget envisions a total of about $4.1 billion for research, development, and commercialization of new and improved energy technologies, including major items such as a total of $1.165

billion for fossil energy development. We are recommending a solar energy program that totals $707 million, and when you combine that with other Federal programs and also tax credits, the total rises almost exactly to $1.5 billion.

We are seeking the improvement in the efficiency and safety of light water reactors and the safe handling of commercial nuclear waste and spent fuel.

We are working on the development of magnetic fusion as an alternative source of energy for the post-2000 period.

We are also looking at new supply expansion efforts. The Department is making some good progress toward implementation of the fiscal year 1980 alternative fuels production program.

Looking at some other components of the Department's energy program of special interest to the committee, we see the continued development of the strategic petroleum reserve, including a request for the reappropriation of $2.3 billion for oil. The preparation of storage facilities for this oil is proceeding, and the revised fuel schedule calls for expansion of the 92 million barrels of supply that is currently in storage to 248 million barrels by no later than 1983. We have an objective of 750 million barrels in storage by the year 1989 at the fill rates we are contemplating, which is 100,000 barrels per day for the next 2 years, and 250,000 barrels per day for subsequent years until that target is achieved.

The enrichment of uranium and the gaseous diffusion plants and continued construction of the gas centrifuge enrichment plant is continuing on schedule. Management of regulatory activity, including FERC, ERA, and Office of Hearings and Appeals, is contemplated as well as the improvement of the Department's information collection analysis and dissemination to reduce the Government's dependence on private organizations for basic energy statistics and to address increased requirements that are mandated by legislation. The weekly petroleum statistics published by the Department are now based almost entirely on data compiled and verified by the Department of Energy, rather than other sources as in the past. Within a few weeks we expect the report to consist entirely of DOE-produced information. Finally I would mention departmental administration funding, including an increase of $20 million for in-house energy management.

I would like to turn, last, Mr. Chairman, to some management initiatives. We have reorganized the Department along energy resource lines, and we have recruited a top team of which I am proud. We have tried to strengthen planning, direction, and control in various program areas and to streamline some administrative functions.

I would mention specifically the installation of a planning, programing, and budgeting system, the development of a revised project management control system and acquisition approval management system, the implementation of a financial management improvement plan, and streamlining and improvement of the procurement process, including more effective controls over the use and performance of consultants.

We believe these initiatives place the Department in a better position to fulfill its mission to carry out an effective and, I hope, successful energy policy, one that is going to allow this Nation to move forward toward a healthy economy that depends on diverse energy sources as opposed to overdependence on oil.

Mr. Chairman, my colleagues and I would be pleased to try to answer any of your questions or your colleagues'.

[Testimony resumes on p. 92.]

[Mr. Duncan's prepared statement follows:]

STATEMENT BY
CHARLES W. DUNCAN, SECRETARY
DEPARTMENT OF ENERGY

INTRODUCTION

The Department of Energy sees its mission as assuring the Nation's orderly transition from an economy dependent upon oil to an economy relying upon diversified energy sources. This report summarizes the Department's efforts to accomplish its mission during fiscal year 1979, its programs for fiscal year 1980, and its plans for fiscal year 1981.

This report can be evaluated only in the context of the Department's assessment of the energy outlook for the Nation and the world. The Department anticipates that the transition in energy use will occur in roughly three phases. For the next 5 years the world will continue to rely heavily on oil, which supplied about half of the world's energy in 1979. During the forthcoming 5-year period, the most readily available, economic source of additional energy is conservation or the more efficient use of the energy now being consumed. In addition, the use of natural gas, coal, uranium and renewable resources can help reduce growth in the demand for oil. Some non-OPEC nations, notably Mexico and the United Kingdom, are expected to increase their oil and gas production. In the medium term, from 1985 to 2000, the world will begin to make a significant move away from oil dependence. During this period, the world has several attractive options for reducing the demand for oil and diversifying its energy supply. These include more coal and coal-derived synthetic fuels, solar technologies, oil shale, unconventional gas supplies and nuclear power, as well as continued improvements in the efficiency of energy use. Beyond the year 2000, the world will move further toward renewable energy sources and advanced nuclear technologies. These technologies will displace both traditional fuels and non-renewable unconventional sources of energy, but improvements in cost and technical performance must be achieved before they can be adopted widely.

This posture statement gives an overview of the Department's policies, programs and strategies. It first describes current conditions of energy supply and demand. It then sets out our current view of the progress we will make in the coming years to limit demand and maintain supply. Finally, it outlines the Department's strategy and programs for fiscal year 1981. Succeeding chapters of the annual report detail each of the Department's major programs.

The Department's assessment of the world energy outlook demonstrates that, for many decades ahead, we must pursue efforts to limit demand and to expand and diversify supply with equal diligence. No single energy source, no single restraint on demand and no single technological innovation can resolve our current energy problems. Their resolution can come only by the pursuit of many distinct and sometimes complicated programs, unified primarily by their common need for full cooperation of all branches of government and for the long term support of all sectors of the American public and economy.

A. CURRENT CONDITIONS

During 1979, the energy demand situation improved while the energy supply outlook deteriorated, particularly for sources outside the United States. Oil price increases throughout 1979 by the Organization of Petroleum Exporting Countries (OPEC) limited demand not only for crude oil and petroleum products, but also for fuels whose prices tend to track the price of oil. In this period, world oil prices doubled. The landed cost of imported oil to United States refiners rose from an average of $15 per barrel at the beginning of 1979 to an average of $29 per barrel in December. This section sets out the Department's assessment of current conditions, first with respect to demand for energy, then with respect to supplies of energy for both the United States and the industrialized countries outside the United States.

1. Current Energy Demand

A very substantial proportion of the world's demand for energy is for oil. This demand occurs in sectors of the economy such as transportation where large-scale substitutions of other energy sources are not now possible. There has been relatively little shift, worldwide, to other forms of energy -- natural gas, coal and solar -- although demand for these sources did increase in 1979 over 1978 levels.

a. United States Energy Demand

In 1979, total energy demand in the United States increased only slightly above 1978 levels. Limits on supply caused by the Iranian revolution and other factors depressed consumption at the beginning of the peak driving season. These limits and substantially higher prices helped keep gasoline consumption over the year at about 400,000 barrels per day, roughly 5 percent, below 1978 levels. In the fourth quarter, after physical shortages had disappeared, gasoline demand was 700,000 barrels per day lower than in the same period of 1978 as a result of higher prices and conservation. Consumption of other petroleum products -- home heating oil, diesel fuel, jet fuel, and residual oil -- remained near 1978 levels of about 11.4 million barrels per day. Overall, consumption of petroleum in 1979 was slightly lower than in 1978.

Natural gas consumption in 1979 remained about the same as in recent years at 19.5 trillion cubic feet (tcf). Industrial demand for gas decreased slightly in 1979 to about 7.8 tcf from 8.3 tcf in the prior year. Use of gas by electric utilities increased slightly to 3.4 tcf from 3.1 tcf in 1978. Some of the net decreases in consumption in these sectors were absorbed by the residential and commercial sectors which increased their use of natural gas from 7.5 tcf in 1978 to about 7.8 tcf.

Coal consumption grew in 1979 by more than 50 million tons largely due to increases in coal use by electric utilities. The 1979 consumption level -- about 700 million tons -- reflects the return of growth trends exhibited before the coal strike and low production levels in 1978. A faster rate of increase in coal use can be achieved only by resolving such issues as stringent environmental controls and the high cost of handling, transporting, and using coal. These barriers and the problems they represent may be overcome through technological advances in conversion of coal to synthetic gas and liquids, through the development of systems that will burn coal in a more efficient and environmentally acceptable manner, and through financial incentives to utilities to encourage substituting coal for petroleum-based fuels.

Total consumption of electricity grew by about 3 percent in 1979, to a total of 2.1 trillion kilowatt hours from a total of 2 trillion kilowatt hours in 1978. About 40 percent of this electricity was used in the industrial sector, 23 percent was used in the commercial sector and 33 percent was used in the residential sector. This pattern of use reflected little change from 1978.

Demand for energy produced by solar devices and renewable energy sources (hydroelectric power and energy from plant materials) remained about the same as in 1978. More than 3 primary quads[1/] of low- and high-head hydroelectric power were used to generate electricity and about 2 quads of forest products were consumed as fuel by the pulp and paper industry. The use of wood for home heating also gave indications of an increase.

b. World Energy Demand

The availability and price of oil dominates world energy use. The world has not appreciably substituted other fuels for oil and world oil consumption increased between 1973 and 1979. The United States is less dependent on oil than the rest of the Free World, using oil for only 46 percent of its primary energy needs compared to 58 percent for the remainder of the Free World as shown in Table 1.

Table 1: Shares Of Primary Consumption, 1979
(percent)

Energy Type	United States	Non-U.S. -- Free World
Oil	46	58
Gas	25	13
Coal	19	17
Nuclear	4	2
Renewables	6	10
Total	100	100

[1/] One quad equals one quadrillion, or 10^{15}, British thermal units (Btu's).

Free World natural gas consumption outside the United States has remained stable in recent years at about 14 quads consumed. Demand for electricity increased and caused a substantial derivative demand for nuclear power, which accounted for about 3 quads of primary energy in the world in 1979 -- three times the 1973 level. In 1979, the world used about 10 quads of energy from renewable sources, slightly higher than the amount used in 1978.

2. Current Energy Supply

In 1979, petroleum constituted about 53 percent of the Free World's energy supply. Throughout the Free World, however, substantial amounts of energy are supplied by coal (18 percent), gas (18 percent), renewable resources (8 percent), and nuclear power (3 percent). Diversification of supply away from oil is proceeding throughout the world, but slowly.

a. United States Energy Supply

The United States is not energy poor, but we have not made sufficient use of all forms of abundant domestic resources. Table 2 shows that the United States produces approximately 78 percent of its energy needs. We produce more domestic energy per capita than Europe or Japan consume per capita. Although imported oil represents only 21 percent of our energy consumption, our continued reliance on imports for nearly half of our current petroleum requirements remains a very substantial problem.

Table 2: Sources Of Primary Energy Consumption (percent)

Domestic Production	1979
Oil	25
Gas	24
Coal	19
Nuclear	4
Renewables	6
Subtotal	78
Imports	
Oil	21
Gas	1
Subtotal	22
Total	100

Each of the domestic sources is discussed below. Foreign sources are discussed in the succeeding section on world supplies.

Domestic production of crude oil and natural gas liquids remained about the same as in 1978 at 10.3 million barrels a day (MMBD) compared to 10.2 MMBD in 1979. With net domestic petroleum demand at 18.5 MMBD, the level of net oil imports in 1979, excluding imports for the Strategic Petroleum Reserve, was 7.7 MMBD. Imports for the Strategic Petroleum Reserve were negligible after August 1979, but averaged 60,000 barrels a day for this year. Substantial quantities of imported oil were used to build private inventories throughout the year.

The amounts of oil imported from specific sources change frequently. The breakdown of imports by country of origin for

1979 is given in Table 3. Imports from Saudi Arabia, Nigeria, Libya and Venezuela increased in 1979 to offset reductions from other countries, including Iran.

Table 3: Gross U.S. Imports of Crude Oil and Petroleum Products. (millions of barrels per day)

	1979[1/]
OPEC	
Saudi Arabia	1.3
Iran	.3
Nigeria	1.0
Libya	.7
Venezuela	.7
Algeria	.6
Indonesia	.4
United Arab Emirates	.3
Other	.2
Total OPEC	5.5
NON-OPEC	
Bahamas	.1
Canada	.5
Mexico	.4
Netherlands Antilles	.2
Puerto Rico	.1
Trinidad/Tobago	.2
Virgin Islands	.4
Other	.7
Total Non-OPEC	2.7
Total Imports	8.2

[1/] These figures are gross imports based on data from the first eleven months of the year. Imports from Iran were suspended by the President on November 12, 1979. No imports for the Strategic Petroleum Reserve are included. Imported petroleum products are counted on a par with crude oil. The sources of the crude refined into products overseas and then imported into the United States are not known. To get net oil imports, subtract U.S. petroleum exports of about 450,000 barrels per day.

Note: Totals may not add due to rounding.

In 1979, domestic production of natural gas did not increase above 1978 levels of 19.1 trillion cubic feet, although drilling activity was substantially higher than last year. Through the third quarter of 1979, the number of exploratory wells increased by 25 percent, while the number of developmental wells increased by 12 percent.

Coal production in 1979 reached a record level of 760 million tons, including about 60 million tons that were exported, an increase of 8 percent over record 1977 production levels. Over 100 million tons of excess coal production capacity still existed.

Nuclear energy continues to be an essential element of the Nation's electric supply system. In 1978, nuclear energy generated approximately 13 percent of the domestic electricity. This figure was slightly lower in 1979 due to the shutdown of nuclear capacity in response to safety and other concerns, which were highlighted by the Three Mile Island accident. There were 71 nuclear reactors with a combined capacity of 52 million watts (gigawatts) in operation start-up testing at the end of 1979. Construction of another four nuclear generating stations with a combined capacity of 4 gigawatts had been completed by the end of 1979. These stations are currently awaiting licensing and are likely to begin commercial operation in 1980. After the Three Mile Island accident, the President endorsed the Nuclear Regulatory Commission's approach, which called for a short pause in licensing activities so that the Commission could focus on safety improvements. He urged the Commission to expedite this process so that it could resume licensing not later than June 1980.

Solar energy and other renewable energy sources, which include biomass, hydroelectricity, geothermal power, and wind, now contribute 5 quads to national energy supply, primarily from biomass (including an estimated 2 quads of forest by-products) and hydroelectricity. Recent oil price increases, coupled with Federal and state financial or regulatory incentives, have begun to accelerate the rate at which solar power technologies are readied for the market. The primary technologies that showed increases in the market place in 1979 include active and passive space heating and solar hot water heating for residential and commercial buildings. A major effort to advance alcohol fuels, which began in 1977, yielded significant results in 1979. This program emphasizes the production of gasohol, which is a mixture of 10 percent ethanol and 90 percent unleaded gasoline. As a result of the 4 cents per gallon excise tax exemption that the President signed into law in November 1978 and substantial increases in the price of gasoline production capacity of ethanol for fuel increased to about 40 million gallons per year at the end of 1979 from a negligible level in 1977.

b. Current Energy Supply Outside the United States

Oil dominated the energy supply situation outside the United States, as it did domestically. The major developments on the supply side were substantial OPEC price increases announced at the April, June and December meetings, the oil price increases announced independently by members of OPEC throughout the year, the increasing volume of oil traded on the spot market at prices significantly higher than posted OPEC prices, the announcements by some OPEC member countries of plans to hold down future production, and the Iranian revolution and subsequent production shutdown in January. The increase in world oil prices throughout the year are noted in Table 4.

Table 4: World Price Of Internationally Traded Oil
(Dollars per barrel)

Beginning of:	Price
January 1979	13.77
February	14.14
March	14.59
April	16.22
May	16.34
June	17.44
July	20.55
August	20.62
September	20.77
October	20.90
November	24.01
December	24.01
January 1980	27.28

Disorder in the world oil market was reflected in the increase in sales on the spot market and a reversal in the traditional relationship between spot market prices and long-term contract prices. With the exception of a brief flurry of activity during 1973-74, the fraction of oil traded on the spot market in recent years has averaged less than 5 percent of oil traded. In the last months of 1979, however, industry sources believe that at least 15 percent of internationally traded oil was sold on the spot market. In the past, the spot market has been a place where excess oil was traded at prices near or even below contract levels. In 1979, however, spot market prices soared to over $45 per barrel, in some cases reaching levels more than 200 percent above contract prices. In turn, these high prices encouraged increases in the price of contract oil.

In 1979, the Free World supply of oil produced outside the United States remained near 1978 levels at about 40 MMBD, about 31 MMBD of which was produced by OPEC nations. Despite curtailments of Iranian production, supplies remained stable primarily because Saudi Arabia and Kuwait raised production above expected levels.

During 1979, total supplies of energy produced in the Free World outside the United States from sources other than oil also remained generally at about 1978 levels. Foreign Free

World natural gas production remained stable at about 7 MMBD oil equivalent after a decline in 1974-75. Except in Australia and Canada, foreign coal production in industrialized countries has not grown for the past two decades. Increases in Australian and Canadian production has helped offset declines in Western Europe and Japan. Coal production in 1979 remained at about 109 MMBD of oil equivalent. Nuclear power production has continued its rapid growth. In 1979, the generation of nuclear power outside the United States increased by over 10 percent and is now nearly approximately equal to United States levels of about 3 quads or the equivalent of 1.5 MMBD of oil. Renewable energy production in 1979 consisted primarily of hydroelectric power and remained at a level equivalent to about 5 MMBD of oil.

B. ENERGY OUTLOOK

The future holds some encouragement relative to the delicate balance that currently characterizes the energy demand and supply relationship with respect to the major sources of energy. In the United States, we expect continued progress in restraining growth in energy demand, particularly with respect to oil. This seems likely to be coupled with continued progress in developing technologies for domestic energy production from all sources and with accelerated energy diversification. The Administration's replacement cost pricing policy, particularly for oil and natural gas, has resulted in a substantial reduction in projected energy consumption. The Administration's decision to allow domestic crude oil prices to rise to world levels in October 1981, in concert with deregulation of natural gas prices at the wellhead under the National Gas Policy Act, have already begun to improve the Nation's capacity to satisfy future energy needs, while encouraging energy conservation.

Worldwide, oil production will also dominate international energy supply for the near term. A reduction in OPEC production is possible in 1980. Increases in non-OPEC production, particularly from the North Sea and Mexico, could partially offset this decline. Gains in world non-oil energy production, especially from coal and nuclear sources, are expected to continue during the next five years as the world continues transition to non-oil energy supplies.

This section summarizes the Department's current assessment of future conditions through 1985, with respect to both demand for energy and expected supplies of energy to meet that demand. These forecasts, though inherently uncertain, represent the Department's best estimates.

1. Future Energy Demand

Energy demand worldwide will continue to be heavily influenced by oil prices through 1990. Future plans by OPEC to hold production down will drive prices up and force oil consuming nations to constrain their demand for oil and to switch to other fuels. By 1985, the United States will make some progress in reducing demand for oil, and greater progress thereafter as viable domestic substitutes become available. Through 1985, other industrialized nations are expected to continue improving the efficiency with which they use energy. Their consumption of oil will remain about the same as in 1979. Demand for natural gas and electricity, particularly for electricity produced by coal-fired and nuclear plants, will continue to rise, but worldwide direct coal consumption will not grow significantly until after 1985.

a. Future United States Energy Demand

Energy consumption will be held near current levels over the next 5 years. A resumption in economic growth will not increase end-use energy consumption as much as in the past because it will occur in the context of higher prices and improvements in efficiency. But consumers will be shifting to the use of energy in converted forms, such as electricity and synthetic fuels, rather than in the primary forms of oil and gas. Because of the conversion losses, primary energy consumption may grow even as end-use consumption remains constant, but this shift in energy use will help move the nation away from dependence on petroleum.

United States petroleum consumption in 1985 will likely be lower than current levels. Consumption of natural gas, coal and electricity will increase. The 3 to 8 percent reduction in petroleum consumption from current levels expected by 1985 — a savings of as much as 1.5 MMBD — will be due primarily to the increasing efficiency of automobiles, utility and industry boiler conversions from oil to coal, and fuel shifting and conservation in the residential and commercial sectors. As much as one-third of this reduction would result directly from the effects of the Administration's initiatives to remove controls from oil prices. By 1985, total natural gas consumption will increase slightly from 20 to 21 trillion cubic feet. Most of the increase will be attributable to gas hook-ups for new and converting residential customers. Use by industry of 50 to 60 million more tons of coal will be stimulated by the coal conversion provisions of the Powerplant and Industrial Fuel Use Act of 1978.

The demand for electricity is expected to grow at about 4 percent per year between now and 1985. The major share of the primary energy inputs to generating plants will be provided by coal and nuclear energy. Coal consumption by utilities will rise from about 500 million tons in 1979 to nearly 700 million tons by 1985. Oil and gas use by utilities could decrease by 1985, but the level of savings will depend largely on measures taken to replace oil-fired utility plants. Renewable sources hold great potential for the future, but consumption of renewables cannot be expected to increase significantly by 1985 because of the time required to develop cost-effective and efficient technologies.

b. Future Energy Demand Outside the United States

Petroleum consumption in the Free World outside the United States will increase slightly by 1985, but will retain its share of total energy demand. The overwhelming dependence on oil for transportation uses will not change significantly by the mid-1980s. By 1985, natural gas consumption will have increased by about 20 percent over current levels and will constitute an expanding share of end-use demand. This increase in natural gas use will occur primarily in the industrial sector, which is more readily equipped to shift from dependence on petroleum than other economic sectors. Direct coal consumption by industry is expected to remain near current levels between now and 1985, but its share of total Free World energy consumption outside the United States will increase in subsequent years. Demand for electricity will increase by about 3 percent per year through 1985, as it captures a slightly higher share of world energy consumption. Demand for energy from renewable sources is not expected to expand significantly by 1985, although rapid growth in demand for decentralized solar space and water heating will occur in the 1990s.

2. Future Energy Supply

Between now and 1985, decreases in United States oil and gas production will be exceeded by increased production from coal, nuclear and renewable sources. Likewise, outside the United States, declining overall production of oil will be accompanied by increasing gas, coal and nuclear energy production. Steady progress will be made in the use of solar and renewable energy sources.

a. Future Energy Supply in the United States

Oil production in the United States is expected to remain near current levels of 9 to 10 MMBD through the year 2000. Declines in conventional production, resulting from depletion of resources on shore in the lower 48 states, will be offset by new production from Alaska, shale and enhanced oil recovery. But if total oil resources in the United States, particularly those off-shore, are less than previously estimated, even higher world oil prices may not offset the continued decline in conventional production.

Conventional gas supplies in the United States will continue to decline in the lower 48 states from about 9 MMBD oil equivalent in 1979 to 8 MMBD in 1985 and to 7 MMBD in 1990. The Alaskan natural gas pipeline will compensate for some of this decline. Gas from Alaska's North Slope can replace the equivalent of approximately 425,000 barrels of oil per day by 1985. After 1985, exploration of the large gas resources that exist in unconventional formations and the production of synthetic gas will further offset production declines.

As the price of oil rises, United States coal will capture an increasing share of industrial energy and electric utility markets and, eventually, will become a feedstock for the production of synthetic fuels. Our abundant resources of coal ensure that there will be sufficient supply for all the energy requirements that coal can meet. With the deployment of technologies currently under development, synthetic liquids produced from coal will grow markedly after 1985.

Nuclear power may provide a substantial substitute for oil use in the future. Almost 10 percent of the oil used in the United States, approximately 1.5 million barrels per day in 1979, is burned in utility generating plants. Nuclear energy could displace much of this oil. Our estimates suggest that the nuclear units scheduled to enter commercial operations between now and the end of 1982 could displace about 250,000 barrels of oil per day, if their production reflects historical trends. Licensing of new nuclear power plants for operation has been suspended temporarily by the Nuclear Regulatory Commission but, as the Commission implements the recommendations of the Kemeny

Commission and those of its own internal review groups, we anticipate a renewal of licensing by mid-1980.

Our estimate of the future growth in the nuclear-generated share of electricity was reduced in the aftermath of the accident at Three Mile Island. This continues the trend of reduced forecasts that began in the early 1970s. The erosion of nuclear growth forecasts has numerous causes. Along with the rapidly growing financial burden of building and operating nuclear plants, two major factors were heightened concerns about reactor safety and radioactive waste management. The President has directed increased efforts on both of these concerns. Nuclear capacity in the United States now appears likely to increase from current levels of about 50 gigawatts to 150 to 200 gigawatts by 2000. The range of future nuclear capacity depends on completion of the 100 gigawatts of capacity currently under construction or with their construction permit granted, and on the outcome of management and regulatory decisions on another 50 gigawatts awaiting construction authorization or in the planning stages.

Renewable supplies in the United States are projected to increase from 5 quads in 1979 to 6 quads in 1985 and 7 quads in 1990. One area of increase in the near-term will be in alcohol fuels. On January 11, 1980, the President announced a 1981 national target for alcohol production capacity of 500 million gallons per year. In addition to use in gasohol, some of the alcohol produced probably will be burned directly, particularly in farm vehicles. Further research, experimentation and development of liquid or gaseous fuels from biomass is now being carried out. These technologies are in varying stages of development and will not make significant contributions without further cost reductions and subsequent market development. During the 1990's the contribution of renewables to total energy demand is expected to increase rapidly toward the goal of serving 20 percent of the Nation's requirements in 2000.

b. Future Energy Supply Outside the United States

World oil production (excluding the United States and Communist countries) should increase about 1 MMBD above 1979 levels to equal 41 MMBD in 1980. It is expected to range between 41 and 55 MMBD in 1985 and from 41 to 60 MMBD in 1990. These estimates will depend primarily on the oil production policies of OPEC countries. A number of oil producing countries with reserves that are large relative to current production levels are increasing their production capacities slowly if at all. These cautious policies reflect a strong preference for production rates that stretch reserves over longer periods and an aversion to even a slight risk of limiting the amount of oil ultimately recoverable. Conventional oil production will decline steadily after the 1990s.

In the next few years, OPEC countries are unlikely to increase their collective oil production significantly above the current level of 31 MMBD. Although by 1985 OPEC production capacity may increase to 36 MMBD, actual output is likely to be constrained by non-technical considerations. Indeed, the Persian Gulf producers -- Saudi Arabia, the United Arab Emirates, Kuwait, Iraq and Iran -- have ample reserves to support increased production.

Extensive exploration worldwide will cause a continued increase in non-OPEC oil production. Output will rise sharply in the North Sea fields. By 1982, North Sea production should be at or near its peak level of about 3.5 MMBD, 2.8 MMBD of which will be produced from the British sector and 0.7 MMBD from Norway. Unless new large fields are found, however, production from the North Sea will begin to decline in 1983 or 1984. Substantial increases in oil production are expected from Mexico, Egypt, India and Malaysia in the next several years, but most of these gains will either support increased oil use in the producing countries themselves or offset increased consumption in other developing nations.

Eastern European nations, when the Soviet Union is included, have been net suppliers to the world market. They export about 1 MMBD, mainly to Western Europe. As a group, these nations may become net importers within three to four years if East European imports more than offset Soviet exports. Oil production in the Soviet Union may well peak in the next year or two as the amount of discovered reserves has fallen sharply in recent years.

China should be able to produce more oil than it consumes in the 1980s. To export more than 0.5 MMBD, however, China will need to make considerable headway in locating and developing exploitable reserves or in enforcement of strict controls on domestic oil consumption.

Free World natural gas production outside the United States should be equivalent to about 7 MMBD of oil in 1980. It is expected to range between 6 to 12 MMBD in 1985 and 6 to 15 MMBD in 1990. Eastern European nations, including the Soviet Union, will produce an additional 7 MMBD and, in 1980, China will add about 1 MMBD to the world supply of natural gas. Following a decline in 1975, production of natural gas in the industrialized world has been stable for the past four years at about 16 MMBD oil equivalent. In the immediate future, production in these industrial countries will decline once again, but worldwide natural gas supplies should increase during the 1980s as production expands in OPEC and in other countries with promising resources such as Mexico.

Outside the U.S., Free World coal supply is now expected to increase from about 10 MMBD oil equivalent in 1979 to about 14 MMBD in 1985 and 15 MMBD in 1990. Coal consumption will reverse its decline and start to increase in Western Europe and Japan. Canada and Australia will continue to expand their production and use of coal.

Free World nuclear energy supply outside the U.S. is expected to increase from about 3 quads in 1979 to between 6 and 15 quads in 1985 and between 15 and 22 quads in 1990. During the next few years, nuclear power will prove the largest single potential source of additional energy production in the industrialized world. It will be the only additional source for some Western European countries and Japan.

In the mid-term, energy supplies from renewable sources will remain only a small part of Free World energy supply. Outside the U.S., renewable supplies are projected to increase from about 10 quads in 1979 to 13 to 19 quads in 1985 and to 14 to 22 quads in 1990. An additional amount of energy from forest and agriculture products is not currently counted in energy statistics.

C. DEPARTMENTAL STRATEGY AND PROGRAMS

The Nation's objective is clear: in 10 years -- by 1990 -- we must cut our dependence on foreign oil by 50 percent, while maintaining a strong and growing economy. Current Department of

Energy programs, together with Administration proposals under consideration by the Congress and efforts of other Federal agencies, provide the Nation's first comprehensive energy strategy. This effort includes a balanced emphasis on both the reduction of demand and increase in supplies. If successful, our energy strategy will maintain our national security, strengthen the domestic economy and assure an adequate energy supply.

This section first describes the Department's FY 1981 programs to limit demand for energy. It next examines the programs to increase the availability of supplies from major energy sources. A third subsection explains the Department's energy-related programs for regulation, information and international affairs. The fourth subsection describes other Departmental programs for general science, defense and administration.

1. Demand Reduction.

The Department has four major efforts under way to constrain demand: conservation programs to improve energy efficiency; phased decontrol of energy prices to ensure that the market price of energy reflects its replacement cost; import limitations on oil; and contingency planning, including various forms of voluntary and mandatory rationing of scarce energy supplies.

DOE and the Department of State are also engaged in a vigorous effort to promote international agreement on a planned reduction of demand for energy, particularly oil, in the twenty member countries of the International Energy Agency.

a. Conservation

The Department's conservation programs are designed to reduce the growth of energy demand by encouraging and providing the means for the more efficient use of energy. These programs encompass a wide range of efforts including public information, financial assistance, research and development and energy conservation standards. Because conservation depends on the actions of tens of millions of individuals, businesses and institutions, the conservation programs are tailored to the specific characteristics and needs of each energy using sector of the economy.

The Department's fiscal year 1981 budget provides direct funding of $1.067 billion to pursue the objective of energy conservation, as shown in the following table. Additional funds are located elsewhere in the Federal budget, particularly through the Solar Energy and Conservation Bank, which, if established by Congress, is budgeted to receive $2.3 billion for construction subsidies from 1980 through 1984. These programs will be complemented by an estimated $739 million in conservation tax credits and supporting programs being implemented by other Federal agencies.

Table 5: Department of Energy budget authorities for conservation programs

	FY 1980	FY 1981
	(millions of dollars)	
Public Education.		
Energy Information Campaign	$ 7	$ 50
Research and Development		
Buildings and Community Systems	$106 1/	$ 97
Industrial	60	59
Transportation	118	113
Conservation Multi-Sector	17	29
Subtotal	$301	$298
Grant Programs		
State and Local	$457	$569
Subtotal (DOE) managed programs	765	917
Energy Impact Assistance 2/	50	150
Total Conservation	$815	$1,067

1/ This includes $4 million for implementing the Emergency Building Temperature Control program which is not authorized beyond 1980.

2/ Although Energy Impact Assistance funding is requested as part of the Department's conservation appropriation, it is passed through to the Farmer's Home Administration for administration. These funds assist communities in meeting needs associated with efforts to increase energy supply.

The Energy Information Campaign is a national advertising campaign using television, radio, newspapers and magazines. The advertising campaign will emphasize the efficient use of energy in homes and for personal transportation. A test program in fiscal year 1980, requested in the $7 million budget supplemental, will provide the data needed to launch full-scale campaign in fiscal year 1981. The Department is requesting budget authority of $50 million for fiscal year 1981.

Conservation research and development activities are designed to maximize conservation efforts undertaken by all sectors of the American economy and to accelerate the development of innovative equipment and processes. Substantial energy savings are possible over the next 20 years, but this high potential is often accompanied by significant technical risk and long-lead times for implementation. The fiscal year 1981 budget includes $298 million for conservation research and development activities in buildings and community systems, industrial and transportation sectors. Budget authority for these programs remains roughly equal to fiscal year 1980 levels because of the increased incentives that now exist for private investment in improved technologies.

The Department's conservation grant programs provide Federal funds to the State and local governments to facilitate energy conservation. These programs are funded at $569 million in fiscal year 1981, an increase of 25 percent over the previous year. Major fiscal year 1981 grant activities include:

1. The Energy Management Partnership Act, now before Congress, which will broaden state and local energy management capabilities and consolidate several existing grant programs and the Energy Extension Service;
2. Energy audits and energy conservation measures for schools and hospitals throughout the nation; and
3. Weatherization assistance for low-income persons, particularly those who are elderly or handicapped.

In addition, the President has proposed that legislation be enacted to establish the Solar Energy and Conservation Bank and to authorize subsidized long term loans to residential conservation investments by lower income households. Legislation now pending in Congress would authorize more than $2 billion over four years for such loans. Energy investments under these subsidized loans would reduce family energy budgets by more than the amounts needed to pay the loans.

Conservation regulatory programs include the establishment of energy efficiency standards for buildings and appliances, implementation of Residential Conservation Service programs and evaluation of the feasibility of establishing efficiency standards for industrial equipment. The Department's proposed Buildings Energy Performance Standards will be completed in fiscal year 1980 and efficiency standards for certain categories of appliances will be proposed. State plans for implementing the Residential Conservation Service, which requires utilities to provide conservation services to their residential customers, will be received and reviewed. These and other regulatory efforts will help ensure that new automobiles, buildings and appliances are designed and built to minimize energy use.

b. Decontrol

On April 5, 1979, President Carter directed the Department of Energy to phase out controls on all domestically produced crude oil by September 30, 1981. This phased decontrol program began on June 1, 1979, with new incentives for those categories of oil where the maximum amount of new exploration and production will result. Beginning on January 1, 1980, prices are being allowed to increase gradually for upper and lower-tier oil that does not qualify for one of the special incentive categories. Increases in the price of oil as a result of decontrolled prices will cause substantial reductions in overall oil demand and stimulate domestic oil production. Coupled with the decontrol of oil prices, the President proposed the Windfall Profits Tax to recoup much of the income the producers would receive as a result of decontrol and oil price increases.

c. Import Limitations

On July 15, 1979, President Carter announced that United States net imports on foreign oil will never exceed an annual average of 8.5 million barrels per day. He announced his intention to establish specific import ceilings each year, and set this overall limitation at 8.2 million barrels per day for 1979. Other nations made similar commitments to limit their imports at a December 1979 meeting of the 20-nation International Energy Agency.

In his State of the Union address for 1980, the President announced that the U.S. import ceiling for 1980 would again be set at 8.2 million barrels per day. While we currently expect to achieve even lower levels of imports, the President made clear his intention to enforce this ceiling through the use of an import fee if imports threaten to exceed the 8.2 MMBD level.

d. Contingency Planning

Contingency planning is a key element for managing energy demand in periods of shortage. The Department has two principal planning efforts under way, pursuant to authority granted by the Emergency Energy Conservation Act of 1979. First, a national gasoline consumption target will be set. This national target will be allocated among the States through voluntary targets that could be made mandatory. Second, the Department is developing a gasoline rationing plan that will be sent to the Congress early in 1980. The Department is also exploring simplified rationing plans based on license plates, coupons, or credit cards as alternatives to full-scale gasoline rationing.

e. International Actions Taken to Reduce Demand

The United States has contributed a renewed and vigorous leadership to the international effort to coordinate reductions in the demand for energy, particularly oil. In June June 1979, the seven major western industrialized countries -- the United States, Canada, the United Kingdom, France, West Germany, Italy and Japan -- held their annual economic summit in Tokyo. Those countries agreed to take several energy- related actions. Most important were their decisions to freeze 1985 imports for each country to 1977-78 levels and to restrict their oil imports in 1980. A follow-up meeting of the energy ministers of the seven summit nations in September reinforced these commitments.

This initiative was followed by a December ministerial-level meeting of the International Energy Agency (IEA), called at the request of the United States. At that meeting the twenty member countries agreed on binding oil import ceilings for 1980 and 1985 for each member. The ceilings chosen will limit the collective demand of the members to 23.1 million barrels per day, plus bunker fuel, in 1980 and 24.6 MMBD in

1985. More importantly, the members agreed to meet quarterly to review the world oil supply situation and, if necessary, to revise downward the previously determined national ceilings. The members also established within the IEA a mechanism to review each IEA country's performance to assure compliance with the ceilings.

2. Supply Expansion

The nation must develop economically and environmentally acceptable substitutes for oil. The prime responsibility for the development of alternate energy sources lies with the private sector. The Federal Government, however, has a role to play in meeting that responsibility. The techniques available to the Federal Government in this effort include:

1. Direct Federal expenditures for research and development and for efforts to remove barriers to the commercial use of existing technologies;
2. Financial incentives such as tax credits, loan guarantees and grants to encourage private expenditures for energy producing capacity;
3. Direct production of energy, such as development of the Naval Petroleum Reserves, the enrichment of uranium for use in light water reactors and the marketing of power from Federal hydroelctric dams; and

4. Maintenance of a substantial reserve of petroleum to protect the nation from its vulnerability to disruption in oil supplies.

The Department's FY 1981 budget provides for the use of each of these means for increasing supply.

a. Research, Development and Applications

The Department's FY 1981 budget provides $4.092 billion to pursue energy research and development programs to facilitate the entry of technologies into the private sector. The development of our fossil, nuclear and renewable resources in an environmentally acceptable manner is critical to changing the nation's long-term energy supply profile. Maintaining the research base necessary to assure continued technical achievements is of equal importance.

Table 6: Research, Development, and Applications Budgets

	Budget Authority (in millions)	
	FY 1980	FY 1981
Fossil Energy	$ 897	$1,165
Solar and Other Renewables	771	868
Electric Energy Systems and Storage	104	112
Magnetic Fusion	356	404
Nuclear Fission	1,186	925
Environment	235	261
Supporting Research	252	297
General Purpose Facilities		60
General Reduction	-71	
Total Research, Development and Applications	$3,730	$4,092

Fossil Energy: Table 6 shows that in FY 1981 the resources devoted to fossil energy research and development have increased substantially over FY 1980 to a level of $1.165 billion. This level of support is indicative of the expanded role that domestic fossil resources are expected to play between 1985 and 2000. Coal will play a central role in the Nation's fossil energy programs. Administration plans to accelerate the production and utilization of coal include $673 million of funding for research and development of advanced technologies for the conversion of coal to synthetic liquids, gases and solids. Construction will begin on two solvent refined coal demonstration plants and a large-scale facility to produce synthetic high Btu gas. The two liquefaction pilot plants, known as Exxon Donor Solvent and H-coal, will be in operation, generating valuable data to support future commercial size facilities. The remaining $374 million provided for coal research and development is focused on:

1. Improving direct combustion technologies;
2. Develop new technologies to increase energy conversion efficiency through means such as fuel cells and magnetohydrodynamics;
3. Developing advanced pollution control technology to support required conversions of utility and industrial boilers to coal; and

4. A major new initiative to demonstrate the acceptability of coal-oil mixtures in utility and industrial boilers.

The Department's petroleum program will develop new and improved technologies for recovering oil from existing and potential oil reservoirs, as well as from unconventional sources such as oil shale or tar sands. Work will continue to define and to improve methods to exploit the nation's unconventional gas resources, including Eastern gas shales and Western gas sands. Total funds provided for petroleum and gas programs, including commercialization activities, are $118 million.

Solar and Other Renewables: The goal of obtaining as much as 20 percent of the nation's energy needs from solar energy, including hydropower, by the turn of the century is reflected in the increased level of resources allocated to these research and development activities in FY 1981. In addition to $868 million in direct expenditures, solar tax credits of $355 million and tax credits for geothermal development totalling $52 million will also be available. Solar technology development activities in FY 1981 include:

1. Continued photovoltaic research and development in thin films, novel concentrators and advanced materials;
2. Completion of the 10 megawatt central receiver power plant;

3. Expanded development of small-scale wind energy systems and fabrication of advanced intermediate and large-scale experimental systems; and
4. Establishment of the Solar Energy Information Data Bank to collect, analyze and disseminate data on solar technologies.

Solar applications programs complement these technology developments. They are intended to eliminate the economic and institutional barriers to early use of solar energy technologies and systems in housing, commerce, industry and agriculture.

Geothermal activities in FY 1981 are directed toward the following activities:

1. The use of hydrothermal energy for commercial electricity generation and direct heat applications;
2. Evaluation of the economic recoverability of methane, thermal and hydraulic energy from geopressured resources;
3. Development of the technologies to reduce the cost of energy recovery from all geothermal resources; and
4. Efforts to extract energy economically from hot dry rock.

The program is being carried out through a combination of hardware development, demonstration plants, technical support to prospective users and loan guarantees. Budget authority totalling $197 million will be requested for geothermal activities in FY 1981.

The FY 1981 budget requests $19 million for further commercial development of low-head hydroelectric power resources at existing dam sites and for new initiatives involving power production from river current.

Electric Energy Systems and Storage. Better methods of transmitting and storing electric energy are critical to the development of new and improved energy technologies. The FY 1981 budget includes a total of $112 million for this purpose. The $40 million requested for electric energy systems in FY 1981 will be used to continue development of the means to integrate new electric energy technologies into existing electric utility systems and to provide new options for increased power transmission and storage. The $72 million requested for an energy storage systems program in FY 1981 will be used to develop reliable, low cost, safe and environmentally acceptable energy storage systems and components for use in transportation systems, systems for heating and cooling buildings, industrial processes, solar power systems and utilities.

Nuclear Energy. The Department's nuclear energy programs are aimed both at nuclear fission and at magnetic fusion. Nuclear fission programs are undertaken by the Department to develop the nuclear technology base and to provide the underpinning for the nation's nonproliferation policy. FY 1981 funding for nuclear fission activities totals $925 million in seven programs, representing a significant decrease from previous years. Funding for the Liquid Metal Fast Breeder Reactor has been reduced in light of current projections that breeder reactors will not be needed until after the year 2020. The level of funding for FY 1981 will maintain the technological base needed to keep the breeder operational and is consistent with United States nonproliferation goals. Activities will be focused on the operation of the Fast Flux Test Facility at Richland, Washington, its supporting facilities and associated test programs. Development will also continue on the water cooled breeder reactor at the Shippingport Atomic Power Station. Also, the naval reactors research and development programs, contained in the Department's defense programs, help support the nuclear fission energy option.

In response to the accident at the Three Mile Island generating station, the President appointed the Kemeny Commission to investigate nuclear power and recommend ways to assure its safety. The report of this group revealed serious shortcomings in the system that regulates and manages nuclear power. The Department of Energy, which has no regulatory or managerial mission in the operation of commerical nuclear power plants, is working with the private sector in matters of nuclear safety. The Department is assisting industry with numerous activities including:

1. Dissemination and interpretation of data on nuclear plant operating experience gained by the Nuclear Regulatory Commission, DOE and the industry itself;
2. Identification of appropriate technologies that could improve the safety and reliability of nuclear plants; and
3. Collection and dissemination of the maximum amount of relevant technical data from analysis of the Three Mile Island accident.

A major activity in FY 1981 is continued and expanded research and development to increase the safety and efficiency of light water reactors. A total of $55 million is provided for this important program, compared to $41 million in FY 1980.

The Department is proceeding with a broad-based technical program for the interim management and permanent disposal of radioactive wastes. The FY 1981 commercial waste management budget of $299 million provides for further expansion of an investigation launched in FY 1980 into the use of geological formations other than salt for isolation of nuclear waste. Investigations also continue in salt formations. The spent nuclear fuel program, funded at $20 million in FY 1981, continues to provide technical and operational support for the

President's commitment to provide interim storage for commercially generated spent nuclear fuel. Separate legislation was proposed in 1979 to provide borrowing authority of $300 million necessary for the acquisition of storage capacity which will be required by 1983. The Administration continues to support that legislative proposal. This program is based on plans presented by the Interagency Review Group for Nuclear Waste Management, appointed last year by the President to create a unified Federal policy for the management of radioactive waste. Of particular concern to the review group was the role of the States in nuclear waste management and the development of effective relationship between Federal and State governments. The findings and recommendations of this group will be the subject of a Presidential policy announcement during 1980.

Funding for the Advanced Isotope Separation Technology program will be increased to $87 million. This will permit the continued development of uranium separation processes that offer potential for the production of enriched uranium at a substantially reduced cost.

Magnetic fusion is expected to be a long-term source of electric energy. Funding of $404 million is provided in FY 1981 to continue development of magnetic fusion technology. The program will develop the sound technical and engineering foundation necessary to design, construct and operate complex experiments and facilities. Progress, measured by improvements in plasma density, termperature and confinement time, has been encouraging. Activities in FY 1981 include continued construction of the Tokamak Fusion Test Reactor and the Mirror Fusion Test Facility. Both are scheduled for completion in 1982. The Fusion Materials Irradiation Test Facility, which will provide the necessary testing capability for materials development and engineering generation, will be completed two years later. In addition, other tokamak and mirror experimental devices will be operated to continue development of a strong scientific base for the eventual design of a fusion engineering test facility.

Environment: The Department's environmental programs associated with energy supply are designed to ensure that the evaluation of environmental impacts is incorporated in energy technology development and deployment activities. The budget request for these environmental programs for FY 1981 is $261 million. Major activities will include efforts to predict the effects of increased levels of carbon dioxide in the atmosphere; determine the long-term effects of low-level radiation exposure; and conduct research on selected energy projects, such as the solvent-refined coal and geothermal demonstration projects. The Department's Project Environmental Planning System is designed to ensure that environmental considerations are considered at every step of the decision-making process, from the earliest design activities through completion.

Support for Energy Research: The Department's supporting research programs provide the scientific base for energy technology development. The FY 1981 budget includes $297 million for basic energy research programs that seek fundamental knowledge of the physical and biological sciences, engineering and mathematics as they affect the production of energy and its conversion into other forms. In FY 1981, the Department will move forward with its investigations into the chemistry of coal, the processes of combustion, and new approaches to the use of solar energy and the isolation of nuclear waste. The Chemical and Materials Sciences Laboratory at Lawrence Berkeley Laboratory will be completed. Cooperative research in universities, industry and national laboratories will be supported in order to speed the transfer of technology.

b. Direct Energy Production

In addition to the research, development and application of energy technologies, the Department is also responsible for producing energy. These activities include:

- The production and sale of enriched uranium for use in domestic and foreign nuclear-powered electrical generating plants;

- The development, production, and sale of oil from the Naval Petroleum Reserves; and
- The distribution and sale of electric power in five power marketing areas.

These services and products are sold to the private sector at prices that are sufficient to recover the full costs of their production and distribution over a reasonable period of time. Revenues obtained from the sale of enriched uranium offset the costs incurred by the Department in providing enriching services. Revenues generated from the sale of oil from the Naval Petroleum Reserves and the marketing of power produced by four of the five power marketing administrations revert directly to the United States Treasury. In FY 1981, production and distribution costs will be $1.7 billion, while anticipated revenues will total over $3.7 billion.

The Department presently enriches uranium for domestic and foreign nuclear power reactor customers and to meet government needs at three gaseous diffusion plants located in Oak Ridge, Tennessee; Portsmouth, Ohio; and Paducah, Kentucky. The FY 1981 budget authority request of $88 million is based on production of 9.5 million separative work units (SWU). Sales of 10.8 SWU are anticipated in FY 1981, some of which will come from inventory. Construction of the Portsmouth Gas Centrifuge

Enrichment Plant is a major project in the Department's efforts to reduce the amount of power needed for enrichment purposes. The Plant is scheduled to provide 2.2 million SWU of capacity by the end of 1988 and is funded at $319 million in fiscal year 1981.

The three Naval Petroleum Reserves comprise the ninth largest known domestic petroleum resource. The FY 1981 budget request provides for continued operation and development of the reserve and the resumption of exploratory drilling at Naval Petroleum Reserve Number 1 after a temporary halt in FY 1980. The request anticipates that the federal share of production from the Naval Production Reserves will be 160,000 barrels per day.

The five Power Marketing Administrations operate high voltage transmission systems to distribute electric power produced at Federal hydroelectric generating projects. The Power Marketing Administrations are the Alaska Power Administration; Bonneville Power Administration, which serves the Pacific Northwest; and the Southeastern, Southwestern and Western Area Power Administrations.

c. Strategic Petroleum Reserve

The largest element of DOE's contingency planning for supply interruptions is the Strategic Petroleum Reserve. In December 1975, legislation was enacted to establish a reserve of up to 1 billion barrels of oil to reduce the nation's vulnerability to a severe petroleum supply interruption. Preparation of storage facilities is proceeding and funds are available in the budget for resumption of oil acquisition in 1980. The revised schedule calls for expansion of the current 92 million barrel supply to 248 million barrels by 1983, with 750 million barrels in storage by 1989. The latter figure includes 24 million barrels of regional petroleum storage. No decision has yet been made on the final 250 million barrels of the reserve capacity.

d. Energy Security Corporation

In July 1979, the President asked Congress to enact legislation creating an independent Energy Security Corporation that would assist the private sector in making investments in the production of synthetic fuels (both liquids and gases) from coal, biomass, peat and oil shale and in the development of unconventional natural gas reserves. As proposed, the Corporation's objective will be the development of domestic production capacity; it would not engage in research and development activities. The President has also asked that it be given the authority to provide support for gasohol production.

The Corporation will be an independent, government-sponsored enterprise with a Congressional charter. It will be located outside the Executive Branch, independent of any Government agency. The Corporation will be managed by a seven-person board

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of directors: a chairman and three other outside directors would be appointed by the President and confirmed by the Senate. In addition, the Secretaries of the Energy, Treasury and one other department will sit on the board. The Administration has set a goal that synthetic fuels developed through the Energy Security Corporation will replace 1.75 million barrels of imported oil per day by 1990.

e. Alternative Fuel Development and Production

On November 27, 1979, Public Law 96-126 was signed, appropriating $2.208 billion to the Department to stimulate alternative fuel production in anticipation of the formation of the Energy Security Cororation. The Department will implement this program during 1980 through feasibility study grants, cooperative agreements, loan guarantees, and price guarantees or purchase commitments.

f. The Energy Mobilization Board

The Administration has acted under existing authority to reduce delays in granting permits to critical energy facilities. Two actions already have been taken. Procedures for setting decision schedules for critical energy facilities were established in April 1979 under the direction of the Office of Management and Budget, and the Council on Environmental Quality issued regulations reforming and streamlining the requirements of the National Environmental Policy Act in November 1979.

To meet 1990 targets for oil import reduction, however, substantial additional authority is needed to accelerate the development of domestic energy production capacity. The Energy Mobilization Board proposed by the President will have three members and will be located within the Executive Office of the President. Board members will serve at the pleasure of the President and will be confirmed by the Senate. As proposed, the Board will be authorized to designate certain non-nuclear facilities as priority energy projects critical to achieving the nation's import reduction goals. For each designated project, the Board will then establish binding schedules for federal, state and local decision-making. Judicial review of decisions by the Board will take place on an expedited basis in the United States Courts of Appeals.

3. Other Energy-Related Programs

The Department of Energy performs several other energy-related roles for the nation that affect generally both demand and supply. These include regulatory measures, energy information processing and international affairs.

a. Regulation

The regulatory activities assigned to the Department are the responsibility of the Federal Energy Regulatory Commission, the Economic Regulatory Administration and the Office of Hearings and Appeals. In FY 1981, funding for regulatory activities total $239 million.

b. Energy Information Administration

The Department's energy information collection, analysis and dissemination responsibilities are carried out by the Energy Information Administration (EIA) which will receive funding in FY 1981 of $116 million. EIA gathers and publishes basic energy statistics on the reserves, production, processing, distribution, consumption and price of the various energy sources. Energy information activities are being expanded in several areas. Better information will be sought concerning the financial conditions of energy firms; oil and gas reserves, production and storage; end-use consumption; emerging sources of energy; and possible energy emergencies. These and other programs will reduce the government's dependence on private organizations for basic energy statistics. In addition, EIA also supports the regulatory and program energy information requirements of the Department. Another mission of EIA is to produce forecasts of future trends in the supply, demand and price of energy as well as analysis of the impacts of those trends. A wide range of economic, statistical and structural models are developed and used to produce the forecasts and analyses. Finally, to improve the credibility and usefulness of energy information, a multi-year program of information validation is being constructed to enhance its quality, timeliness and organization.

c. International Affairs

Solutions to energy problems can no longer be confined to the initiatives undertaken by individual countries. The distinction between world and domestic energy problems has become blurred as domestic energy policy is increasingly influenced by world events. Responsibility for the conduct of the nation's international affairs rests primarily with the Department of State, but the Department of Energy has an important role in analyzing international energy problems and promoting cooperation with other countries to provide solutions to these problems. Five million dollars have been requested for the Department's Office of International Affairs in FY 1981.

4. Other Programs

There are three other functions in the Department of Energy -- general sciences programs, defense programs and administration.

a. General Sciences

The purpose of the Department's General Sciences program is to gain deeper understanding of the structure and behavior of matter by pursuing fundamental knowlege in physical and life sciences. General Sciences programs are not specific to any particular technology. Rather, investigations into areas beyond existing frontiers of knowledge are expected to yield long-term scientific and technological breakthroughs. The FY 1981 request for General Science programs totals $523 million.

b. Defense Programs

The Department of Energy provides the requirements of the Department of Defense for nuclear weapons, nuclear materials and management of nuclear waste. The Department is also charged with the responsibility of improving the technology for verification of nuclear test treaty compliance and of the development of nuclear materials safeguards and security procedures, including classification of sensitive information. Inertial Confinement Fusion technology is part of the Defense Programs mission because of its relevance to nuclear weapons development. The Naval Reactor Development program, managed as a part of the Nuclear Fission Program, designs, develops and tests improved naval nuclear propulsion plants and reactor cores needed for naval ship propulsion. Total FY 1981 funding for DOE Defense Programs is $3,443 million, up from $3,006 million in FY 1980.

c. Departmental Administration

Activities in this category include general management and administration of the Department. FY 1981 funding requested for these activities totals $362 million, an increase of $47 million over the FY 1980 level. This request includes $292 million to provide for the management support costs associated with headquarters staff functions and multiprogram field offices (this includes executive management, legal assistance and counsel, financial management, audit and investigative activities, external communications, engineering and construction management, administrative activities, minority economic impact, and equal employment opportunity). In addition, funds are provided for policy analyses and systems studies; efforts directed toward the Department's communications with State, local and tribal government's energy situations; in-house energy management for retrofit and fuels conversion projects; and security investigations. These costs are partially offset by miscellaneous revenues.

D. MANAGEMENT INITIATIVES

Recent changes, implemented in October 1979, streamlined the organization and better defined responsibilities for accomplishing Department objectives. These changes were designed to provide better services to the public and to improve cooperation with the Congress.

The principal components of the Department are divided into three groups. The first group includes offices that report directly to the Secretary and Deputy Secretary. These include Legislative Affairs, Public Affairs, Consumer Affairs, and Intergovernmental Affairs, which work directly with the public; state, local and tribal governments; and other entities of the Federal Government. The Policy and Evaluation Office, the General Counsel, the Economic Regulatory Administration, the

Energy Information Administration, the International Affairs Office, the Inspector General, the Office of Hearings and Appeals, and the Board of Contract Appeals also report directly to the Secretary and Deputy Secretary.

The second group includes the Department's research, development, resource applications, and revenue-producing activities. These offices -- Conservation and Solar Energy, Fossil Energy, Nuclear Energy, Resource Applications, Energy Research, Defense Programs, and Environment -- report to the Secretary and Deputy Secretary through the Under Secretary. The Fossil Energy and Nuclear Energy offices were created from the former Energy Technology organization which was dissolved to align technology developments better with other program activities.

The third group reports to the Secretary and the Deputy Secretary through the Chief Financial Officer. It comprises those offices with day-to-day responsibility for the management of the Department's financial, procurement and personnel resources. These offices include the Controller, Administration, Procurement and Contract Management and Equal Opportunity. The Office of Minority Economic Impact reports to the Secretary but coordinates its activities with the Chief Financial Officer.

Four primary objectives have now been met: First, we have improved lines of control from top management to ensure that policies and procedures are better defined and that there is a mechanism to ensure they are consistently followed. Better lines of demarcation have been established between activities so that responsibilities for the success or failure of DOE undertakings is firmly assigned and, finally, improved control systems have been put in place to monitor the Department's performance.

Second, we have improved our service to the public and our cooperation with State, local and tribal governments. Our public information systems are critical to the accomplishment of the Department's mission. Many of our program objectives, such as conservation, can be achieved only through the decisions made on a daily basis by each American. Communications with citizens groups are important in fostering public understanding of our energy problems and solutions. Our mechanisms for cooperation with State, local and tribal governments must function smoothly because they bear an increasingly important role with respect to the Nation's energy transition from oil to other sources of supply.

Third, we have improved our capability to supply the Congress with the information it needs to formulate legislative policy and to maintain close liaison between the Administration and Congress in dealing with energy matters.

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Fourth, the operational management of the Department has improved significantly. New management systems have been established for planning, programming and budgeting; project management and control; and project acquisition approval. The Department has initiated a comprehensive financial management improvement program, established new guidelines and procedures for the use of consultants and has taken steps to improve the responsiveness of its procurement system. Finally, most of the critical personnel shortages have been corrected, including the addition of manpower resources for Conservation and Solar activities and the Inspector General.

In pursuing these objectives, the Department is aware that organizational change can have a disruptive effect in the short run. For that reason, emphasis was placed on efficient lines of control while most organizational components below the Assistant Secretary level were left intact. Now that the organization is in place, the Department is in a better position to fulfill the mandate with which it has been charged by the President and the Congress to develop and carry out an effective energy policy that will allow the Nation to move smoothly toward a healthy economy drawing on diverse energy sources.

CONCLUSION

The transition we face has far-reaching implications. It represents a joining of national resources and resolution, and international collaboration on a scale never before attempted in peacetime. It represents a new stage in the continuing evolution of America. From the beginning, our country has been a nation in transition. Much of our history has been built on creative change. We have refused to be static socially, economically or technologically. As a nation and a people, we are not strangers to the challenges and opportunities of new circumstances. The transition from an oil-dependent economy to an energy-diversified society is, we believe, no more insurmountable a challenge than many we have faced successfully in the past. But it requires a close partnership between the public and private sectors; it requires the long-term integration of different energy approaches in the face of factors sometimes beyond our control and it requires a recognition that there are no short cuts, no technological miracles, and no quick solutions dictated in Washington that by themselves will make the transition significantly shorter or less demanding. The days of cheap, accessible energy are over. Every American must participate in bringing America forward; no one should be left behind. The national energy program outlined here enlists the cooperation of all segments of our society to free our Nation from excessive foreign dependence and to ensure that America enters the next century secure in her own resources.

Mr. DINGELL. Mr. Secretary, we thank you for a very helpful statement.

The Chair will recognize my colleagues in the order of their appearance for 5 minutes under the rules of the subcommittee. The Chair recognizes now my good friend and colleague from Ohio, Mr. Brown, for 5 minutes.

Mr. BROWN. Mr. Secretary, on page 18 of your submitted statement, you indicate that by 1985 natural gas consumption will increase by about 20 percent over current levels, with the bulk of this increase occurring in the industrial sector.

Won't incremental pricing make attainment of this goal unlikely, if not impossible? What is the Department's position on FERC's proposed rules on incremental pricing?

Secretary DUNCAN. I think FERC is moving into the phase 2 of incremental pricing almost immediately. I think those hearings are being contemplated very soon. I know the Department of Energy is to make a statement of position on that. I think the timing is such that it will have to be done today.

I believe we will see increased use of gas with or without incremental pricing. I know the industry is very anxious to get some moderation in the incremental price initiative. I think the initial rationale for incremental pricing is sound rationale.

I really would be disinclined to make a further statement about it, anticipating FERC's consideration of the issue.

We will be issuing a statement to FERC on this issue.

Mr. BROWN. Let me just suggest that I made a comment in my opening statement about the multiprice system for natural gas. I was not a fan of the Natural Gas Policy Act, and I now see that we are willing to pay the Canadians what, $4.45 per mcf of gas?

Secretary DUNCAN. They have asked $4.47.

Mr. BROWN. $4.47 for natural gas and the Mexicans $3.60?

Secretary DUNCAN. $3.65.

Mr. BROWN. And the current price ceiling on what we will pay Americans for producing natural gas?

Secretary DUNCAN. Substantially less.

Mr. BROWN. $2.60?

Secretary DUNCAN. Yes, sir.

Mr. BROWN. I find that to be sheer nonsense. I don't see how we can be willing to pay Mexicans and Canadians more for gas, subsidize the price of gas to consumers by keeping the price of domestic production low, and expect to have anything different than has happened to us in the oil pricing situation, where we still—still; I underline that—are allowing American producers less than we are allowing our friends in OPEC, who have us by the throat, not to mention other parts of the anatomy.

I am concerned about our getting into this kind of pattern on gas because the pricing restrictions on gas go from now to 1985 or 1987, depending on the inclination of some President we might have then.

So I would urge you to give some thought to that in the future, Mr. Secretary.

Let me go further into incremental pricing to the extent that I think the pattern means that you will get the price for some domestic industrial users so high that they will switch away from natural gas into—what are the other choices, oil, electricity, or coal—I hope coal, but our environmental restrictions seem to limit that, and then we will have a real price squeeze, I guess, on natural gas, as a result of the incremental pricing system.

Let me raise one other question. You have requested a 32 percent increase in the budget for departmental administration. Would you advise us what justifies that increase?

Secretary DUNCAN. I mentioned there is $20 million involved there, $20 million of increase, that is for in-house energy management. I have some detail here I can give you.

Do you want me to go down each category, Mr. Brown, and give you——

Mr. BROWN. I think it might be appropriate if you would like to do it. Either that, or if we could have it submitted for the record, if you have it available to us, and I can look it over for some questions this morning.

Secretary DUNCAN. I can hand it to you now.

Mr. BROWN. All right. Let me ask one other question.

The President has promised to send Congress legislation providing incentives for utilities to convert from oil to coal. Do you have any idea when that will come up?

Secretary DUNCAN. Yes, that legislation has been prepared and should come up this month. It is now in interagency review, and I think it important that it come up this month, with the legislative calendar being somewhat abbreviated this year. I think it very important that legislation be passed this year, and we are trying very hard to get it up this month; I have every expectation it will be up this month, hopefully long before the end of the month.

Mr. DINGELL. The time of the gentleman has expired.

The Chair recognizes the gentleman from California, Mr. Moorhead.

Mr. MOORHEAD. Thank you.

Thank you, Mr. Secretary, for coming this morning.

We all have problems in the energy field, and I suppose, as a Representative from southern California, I am concerned with problems that are different than some of the others, but recently over the strong objections of the California delegation and many private and public utilities in our area, the DOE approved on an interim basis the Bonneville Power Administration pricing scheme for surplus hydroelectric power. The scheme will result in a 500-percent increase to California consumers. The excessive rate increase to California subsidizes rates for energy in the Pacific Northwest, where rates are among the lowest in the country, and where there is a tremendous amount of waste because of the cheap prices.

Hydroelectric power used in southern California displaces oil-fired generation. BPA's pricing scheme will result in higher charges to those utilities where oil is displaced by hydro. Instead of encouraging oil displacement, BPA and DOE are placing economic penalty on this and joining OPEC in its price increases.

Do you view this interim action as consistent with the President's desire to encourage reduction of oil consumption?

Secretary DUNCAN. The price increase that has just taken place at Bonneville, I know, was a very, very sharp increase.

Mr. MOORHEAD. But it penalizes only us and not the people in the basic rate area.

Secretary DUNCAN. Isn't there some legislation respecting their charge on that?

I am going to have to get the factual base a little more in detail, frankly.

Mr. MOORHEAD. There is public law that apparently would prohibit this kind of thing, and there is legislation that is going through the Congress, where there may be some prohibitions added, but that isn't the law as yet.

Secretary DUNCAN. I remember considering this, but it has been several months ago. It was before Christmas that I had any amount of detail on the issue.

Mr. MOORHEAD. All 43 Congressmen and both Senators are extremely concerned about this.

Secretary DUNCAN. Yes, sir, I understand.

Mr. MOORHEAD. I wish you could look into it for us. It is a very important factor.

Secretary DUNCAN. I certainly will. The fact is that those costs, along with other energy costs, are moving up very, very sharply, and they have been low.

Mr. MOORHEAD. We wouldn't object if they weren't changing the price basis for us and not the other people. They want to charge us, not based upon what the costs are, but on what they say the savings are to us by not using OPEC oil, and that is an entirely different system than we have ever had before.

Secretary DUNCAN. Let me give you a considered response to your question, Mr. Moorhead, but first ask my colleagues if they can give anything.

Mr. MOORHEAD. I would appreciate that, and one that they can give our people, too, because they are very concerned about it.

[The following information was received for the record:]

BONNEVILLE POWER ADMINISTRATION'S
NONFIRM ENERGY RATES
(SCHEDULE H-6)

At the Subcommittee on Energy and Power fiscal year 1981 budget overview hearing held February 8, 1980, Representative Carlos J. Moorhead requested that the Department provide a response for the record, addressing the California delegation's concern about the increase in the Bonneville Power Administration's nonfirm energy rates (Schedule H-6) which became effective, on an interim basis, December 20, 1979. The following statement explains the nature of and rationale for the H-6 rate.

There are two basic components in the H-6 rate for non-firm energy: a rate for displacement of thermal generation (oil, gas, coal, etc.) and a rate for sales other than for thermal displacement. We expect California utilities will primarily be using nonfirm energy for thermal displacement.

The thermal displacement rate is based on both value-of-service (the share-the-savings concept) and cost-of-service considerations. The share-the-savings concept was used in designing the rate (1) to provide adequate incentives for displacement of higher incremental cost resources such as oil by more desirable resources such as coal, nuclear or hydro; (2) to assure an equitable exchange of the benefits of energy sales between the Pacific Northwest and Pacific Southwest as indicated in the Pacific Northwest Regional Preference Act (Public Law 88-552); and (3) to be consistent with the Power Plant and Industrial Fuel Use Act of 1978 (Public Law 95-620) by encouraging generation that does not use oil or natural gas as fuel. The rate was designed to apply to all nonfirm energy sales, not merely to sales outside the Pacific Northwest.

Historically, the concept of mutual sharing of benefits between regions motivated the construction of the Pacific Northwest-Pacific Southwest Intertie. This interregional transmission has enabled sales and exchanges which have resulted in considerable savings in both regions. The regions exchange power to take advantage of diversity in stream flows and peakloads. Bonneville is able to assure a greater firm load carrying capability and the Southwest is able to offset thermal generation by purchasing peaking capacity and nonfirm energy.

At the time the PNW-PSW Intertie was constructed, oil-fired generation in California had a decremental cost of 3 to 4 mills per kilowatthour and the cost of generating nonfirm energy in the Northwest was less than 1 mill. Bonneville's rate for nonfirm energy was 2.5 mills but the rate for surplus sales to California was reduced to 2.0 mills to approximate a sharing between the regions of the benefits from displacing oil-fired generation in California. These low rates reflected the fact that at that time the Pacific Northwest was able to meet most of its loads from hydroelectric resources. Since that time the Northwest has become increasingly dependent upon thermal generation. This growing dependence on thermal resources results in a substantial impact on the Pacific Northwest region's cost of power and on the way the region must most efficiently operate its resources commensurate with the risks associated with a large hydroelectric system.

The rate for nonfirm energy is very important to the continual sharing of benefits between regions in the face of the changing energy supply and costs in the Northwest. As the Northwest develops more expensive thermal resources such as coal and nuclear, the value of nonfirm energy in the Northwest increases. A rate for nonfirm energy which is less than the operating cost of these resources would provide an incentive for these plants to be displaced rather than oil-fired generation in the Southwest. Further, a relatively low rate for non-firm energy, coupled with the high cost for replacement power, would result in greater regional reliance on the hydro system and therefore less non-firm energy would be available for displacement of other resources outside the region

Additionally, Bonneville and other Northwest utilities are finding it difficult to meet growing loads by relying on timely completion of planned central station coal and nuclear plants. This is producing a regional resource deficit. Part of the deficit will be met by reducing demand through conservation, but the remainder of the deficit would have to be made up by other resources or some curtailment of load would be necessary. The possibility of a regional deficit has led Bonneville and others to examine alternatives which include the economic feasibility of meeting loads with a combination of surplus energy and combustion turbines. The effect of pursuing this alternative would result in a reduction of non-firm sales to the Southwest.

The attractiveness of the combustion turbine alternative depends upon the rate for and availability of Bonneville's non-firm energy, the cost of fuel for the turbine, and the number of hours that the turbine would be required to operate. Therefore, the lower the rate for non-firm energy, the more incentive there would be to reevaluate operational and planning criteria to find means for more intensive use of nonfirm energyiin the Northwest. The net effect of a low secondary energy rate, as suggested by Mr. Moorhead, may well mean a reduction in the availability of non-firm energy from the Northwest for the displacement of oil-fired generation in the Southwest.

An analysis prepared by Bonneville for its 1979 Wholesale Power Rate Filing indicates that California utilities on the average would pay only 1 mill per kilowatthour more than Bonneville's average cost of power of 7 mills. Many California utilities have assumed that the nonfirm energy rate would average 15 or 20 mills per kilowatthour for nonfirm energy sold to California to displace thermal resources. In all cases, the purchaser of nonfirm energy under the direct thermal displacement rate would receive at least 50 percent of available benefits from a nonfirm energy sales transaction when the price of the displaced thermal resource is 13 mills per kilowatthour or higher. When the decremental cost of the displaced resource is less than 13 mills per kilowatthour the floor rate of 6.5 mills per kilowatthour during peak hours would apply and the purchaser would receive less than 50 percent of the savings. The higher rate

(15-20 mills/Kwh) is expected to be applied only for short periods when the Northwest hydro/thermal system is surplus to the needs of the Northwest but able to be controlled. Most of the time when surplus non-firm is available from Bonneville the hydro system cannot be controlled to save any power not sold. At these times the rate is expected to be at the floor of 6.5/4.5 mills/Kwh.

Share-the-savings or split rates for nonfirm energy, similar to Schedule H-6, are common among utilities throughout the United States. Power pools, investor-owned utilities, and other power marketing administrations employ the share-the-savings rate concept for nonfirm energy sales. The rate is designed to continue the sharing of benefits between the Federal system and nonfirm energy purchasers and is consistent with national energy policy. The rate provides a disincentive for the development of high incremental cost fueled resources such as combustion turbines in the Northwest while providing the purchasers with power at rates much below their alternative cost. Based on Bonneville's analysis, most of the dollar benefits from these transactions accrue to the purchasers of nonfirm energy. The Department of Energy considers that, at the present time, a rate of this type is appropriate for Bonneville's nonfirm energy sales.

March 20, 1980

Mr. **Moorhead**. Another question that deals with southern California is the fact that we can't burn coal because of environmental and site restrictions. Nuclear can't be used because of rules of the State and NRC. We have to use light oil, for the most part, because of smog considerations, and yet the Fuel Use Act will prohibit the use of natural gas after 1990, and is cutting it back now.

What are the utilities and businesses expected to do with these oil import quotas if they can't use other sources of energy?

Secretary **Duncan**. As I recall, it was contemplated by the Fuel Use Act that you be allocated tickets predicated on historical usage and those who wanted to continue to burn oil would have to procure the tickets from those who had made the conversion. That focuses on the cost of having environmental regulations, which might be considered by some people to be more stringent than, let's say, Federal standards—they would have to pay that cost.

Now, it is my belief, Mr. Moorhead, that is primarily pursuant to the State implementing plan, the SIP, more so than it is to Federal regulation.

Mr. **Moorhead**. Because this is a problem for us, I just wanted to focus your thinking on it.

Secretary **Duncan**. I understand.

Mr. **Moorhead**. I think there is a problem there that needs to be solved.

Secretary **Duncan**. I concur with you completely. I think it is a very serious problem.

Mr. **Moorhead**. There is another question of whether we are going to have to adjust the Clean Air Act in order to produce heavy crude in California and whether we will get the leadership from your agency in doing that, in order to provide the energy that we need in the West and other parts of the country, also.

Secretary **Duncan**. Right, and this problem is not confined to the West. You know, we would like, and we are accelerating, coal conversion all we can. You are reading in the newspapers this week about the issue of acid rain and the environmental constraints. They are very, very fundamental issues you are addressing.

Mr. **Moorhead**. I can assure you we are all interested in the same goals that you set forth, and we want to work for the conservation and the reduction of our imports, and we will all cooperate to that extent.

We don't always agree on the means, but we appreciate that you have a difficult job. We want to cooperate, but we really are concerned in our area about these problems that I have mentioned, and I hope that you will take some special interest in it, and give us some answers that we can use.

Secretary **Duncan**. I will try.

Mr. **Dingell**. The time of the gentleman has expired.

The Chair recognizes now the gentleman from Indiana, Mr. Sharp.

Mr. **Sharp**. Thank you, Mr. Chairman.

First of all, Mr. Chairman, I would like to renew a concern with the committee which I raised last year and which I intend to raise more vigorously this year, and that is if we are about to embark on another annual authorization for the Department of Energy, I think there should be agreement between the House and Senate leadership that it is the intention to try to bring it to a conclusion this year. If not, I think we should seek to defeat it in the subcommittee and not waste this committee's time, the Department's time, the public's time, and the House Members' time on this bill one more time.

For example, last year, we ended up losing out on the appropriations we wanted to make regarding away-from-reactor storage. I think the Department is going ahead with the studies we envisioned in the bill. That issue lies in limbo now, and we are in a position we have to make decisions anyway. This is the second or third year that this has been the case.

We, of course, completed our action on the authorization bill in the House, in this committee. The Senate, I guess, has ignored that particular bill, so I would urge that we seek from the House leadership an agreement from the Senate leadership that we are either going to complete this or can the process and save everybody's time. Then we can deal selectively with issues more thoroughly and engage in oversight on a more selective basis; we can do our job more effectively, and the department can do their job more effectively.

I don't expect a response, Mr. Chairman, but I would urge that be our direction.

Mr. **Brown**. Will you yield for me to say, hear, hear?

Mr. **Sharp**. Second, Mr. Chairman, I would like to say to the Secretary that I appreciate the fact they have the new team together and are trying to get the Department moving, and more power to them.

Particularly one of my concerns, and theirs, I know, is the emergency preparedness. We have to be able to manage crises when they come. We have to be able to rapidly reduce consumption where necessary at that point, and I know the department has made this a high priority.

We all received our management books of energy crisis management, and I am hopeful they represent real actions that can be instituted. And I think it might well be worth one of the items of this committee being to review this year where we stand and what additional authority the Department may need in that respect, but I think that is critically important.

The question I would ask is what is happening to the strategic petroleum reserve? As has already been indicated up here, I think there is considerable concern in Congress that we are not filling, if I understand it, still yet today, and I guess I would like to know what is the plan, when do we begin filling, and why are we not filling at this time?

Secretary **Duncan**. I would like to see us begin now to fill the strategic petroleum reserve. As you know, we have asked for the reappropriation of $2.3 billion in the fiscal year 1981 budget for the strategic petroleum reserve. I would like to see us begin to fill the reserve if we can have the right kind of consultation with our partner countries, both consumer and appropriate producer countries, to get this done.

We have an inventory level in the world today; we have a price situation in the world today; we have an expectation of production which might give us an opportunity this year to fill that reserve.

I personally would like to see that done. I think it is very important—not only for national security considerations but for economic considerations as well, and possible better management of oil inventories and the opportunity it presents for that purpose—that we begin now to fill that reserve.

I am a very strong advocate of filling the reserve.

Mr. Sharp. Mr. Secretary, I guess the money involved in the request is less, or at least you are shifting moneys not spent, and while normally it is a good thing when a Government agency cannot spend money appropriated, but in this particular case, while I guess I understand, that there was the obvious market problem early on last year, of where on Earth do you get oil without having to pay absolutely outrageous prices, I guess I want to know what is the relationship with the Elk Hills sales.

There has been a lot of questions raised as to why the Government is selling that for $40 a barrel, although it is a nice thing for the Government to get the $40 than somebody else, but why haven't we, or why aren't we, or are we going to utilize that oil? You might not use it yourself, but exchange it. But why not Elk Hills?

Secretary Duncan. I think I might disagree with one thing you said, that is good for us to get that oil. Actually, that caused us great complications.

As you know, we have to produce the Naval petroleum reserve at the optimum production rate, and we are mandated by legislation to sell that to the highest bidder. I think it is disadvantageous when we are using all the influence we possess with producing countries and trying to get discipline on the consuming countries as well, respecting what they are willing to pay for oil, that we of the U.S. Government sell oil in excess of the world market.

I would not like to see that situation repeated again. I am moving and will be working with the Congress to see that we don't have any repetition of that Elk Hills sale. I think that is a good candidate to put oil into the strategic petroleum reserve.

Mr. Sharp. I would hope we would move rapidly to do that.

Is there any other consuming country that is not filling their strategic petroleum reserve, or have not over the past year, that have some kind of cooperative arrangement with the consuming nations, or us?

Secretary Duncan. The stocks at primary level at the end of December last year are projected to have been 1,248,400,000 barrels in all petroleum categories, not just crude oil. It is my belief that is a historical high. I don't have any certain knowledge about what other consuming countries are doing, but what I hear is that they are adding to their inventory levels. I am not aware of any having an expectation of inventory level that would be as significant as the 1 billion barrels we have talked about within this Government, but I would think they would agree that it is in the interest of the western world that that reserve be filled. I would hope that in these consultations we will have with our partners, our allies on the consuming end would see it that way.

I have no expectation that they won't. To have filled that reserve last year, particularly in the last 6 months of 1979, with the chaos that existed in the marketplace, would not have been appropriate, in my judgment. There seems to be a situation today where it is a valid consideration, and we ought to move to do it if we possibly can.

Mr. SHARP. Mr. Secretary, I don't dispute what you are saying about last year, but I do wonder why over the last 3 or 4 months we have not reversed the decision. I think we have to take an increasing tough line with the producers—and I realize it is hard and is a delicate situation—and with our allies.

There is a growing impatience within this country, maybe not all well-founded, that we are the ones who take the lead, get the action, and we are going to begin asking who is going to cooperate, and if they are not, we are going to have to go along and push our interest a lot harder in this.

I am afraid we will end up being naked, while Japan and Germany fill their reserves and criticize us. We are starting to cut down on consumption. We haven't been good about that in the past, but we are starting, and I think we have to make it damn clear to them we intend to have our reserves filled so we are protected. They are going to want to share our oil when they get cut off, and under the International Energy Agency we will have to share.

Mr. DINGELL. The time of the gentleman has expired.

Do you have a response?

Secretary DUNCAN. I have no response, because I agree with him.

Mr. DINGELL. The Chair recognizes the gentleman from Tennessee, Mr. Gore, for 5 minutes.

Mr. GORE. Thank you, Mr. Chairman.

Welcome, Mr. Secretary, and your colleagues.

Let me briefly followup on that line of questioning. I take it that your reference to consultations with the producing countries is a reference to the implied or expressed desire on the part of Saudi Arabia and others that we not fill our reserve. Is that the case?

Secretary DUNCAN. I have had no conversations personally with anyone from Saudi Arabia about the filling or the nonfilling of the strategic petroleum reserve.

I would say this about Saudi Arabia, though. Saudi Arabia has been responsible in their decisions respecting what they are going to do on pricing and production. I define responsibility, as I said to a committee last week, as constantly selling at the lower end of the price range, being willing to add 1 million barrels a day to production, to urge a single price at the most recent two OPEC meetings and to try to get as moderate an increase as possible.

So I think it would be appropriate that one of the countries we would consult with would be Saudi Arabia, but it doesn't tie back to any commitment or conversation.

Mr. GORE. I did not intend the tone of my question to indicate otherwise, with regard to Saudi Arabia, and I feel that one of the useful purposes of the strategic petroleum reserve is that it does give us some flexibility to stop buying at times when the market is tight. But there is a line that you cross somewhere, and I agree with my colleague, Mr. Sharp, that we probably crossed that line 3 months ago, when we really should have insisted upon our policy of resuming sales.

We heard from Secretary Deutch back in September that a decision was imminent as to when the reserve would be filled again. Now, I want to try to pin you down a little bit.

You said this year. Does that mean 10 months from now, or does it mean 10 days from now?

Secretary DUNCAN. The most recent interagency meeting I was in on this subject was this morning.

Mr. GORE. Does that mean this afternoon?

Secretary DUNCAN. I would not predict this afternoon, but I hope very, very soon.

Mr. GORE. This month?

Secretary DUNCAN. Yes. That is a hope.

Mr. GORE. OK, that is fine.

Let me turn to another subject. An issue that will soon be coming up in the Omnibus Energy Act conference is gasohol, and we have all been hearing a lot more about it.

Can you tell us what portion of last year's $2.2 billion appropriation for alternate fuels will be devoted to alcohol fuels?

Secretary DUNCAN. No, I can't tell you precisely what portion, but I would envision that there would be at least some portion. There is a lot of new production capacity being added for the manufacture of ethanol for use in gasohol, and so I am very pleased with the rate of increased capacity.

It seems as though without anything more than the 4-cents-a-gallon tax exemption which currently exists and which we have recommended extending, that there will be at least a quadrupling in this year of what had been 1979 production of ethanol.

Mr. GORE. There are some problems with distribution, Mr. Secretary, that I think you should be aware of. The Office of Hearings and Appeals is, of course, a quasi-judicial agency, but you and the Department exert considerable influence over their policies, and the OHA handles all requests to increase the gasoline base period allocation for jobbers and retailers. Lately, a good many of these requests have been from jobbers promoting gasohol or seeking to distribute gasohol.

Is it the DOE policy to expedite OHA requests for gasohol upward certification?

Ms. ROLLINS. Yes, it is. More importantly, my belief is you should also know that the ERA will be proposing very shortly a regulation that will deal with many of these distribution and supply problems with respect to the marketing of gasohol.

Mr. GORE. I can cite you a number of cases where requests for gasohol upward certification have taken 5 to 6 months in my congressional district.

Ms. ROLLINS. Well, Congressman, I am aware of what our wretched past has been, and part of my responsibility in coming on now is to cure that.

Mr. GORE. That is why we brought you back into this Department.

Ms. ROLLINS. Right, and it is my intention to get it done.

Mr. GORE. We are glad to have you back.

Ms. ROLLINS. Thank you.

Mr. GORE. I hope Secretary Deutch changes his mind about leaving. We have a good team in there now, and I hope you can keep it together, Mr. Secretary.

Secretary DUNCAN. I have worked on that.

Mr. GORE. On the enforcement question, you now have only eight attorneys dealing with criminal prosecutions of pricing regulations. Your Civil Division, of course, is larger, and Justice, of course, has the primary responsibility over criminal matters, but Justice cannot, and according to the past history, has not, done anything without a DOE referral.

Do you have any plans to beef up the Criminal Investigation Division?

Mr. COLEMAN. It has been our judgment that the number of lawyers in the Special Investigations Unit is appropriate. They get a great deal of assistance from the lawyers of petroleum regulations and interpretations in the civil enforcement area, because the issues are the same, and, as you say, the Criminal Division of the Justice Department has primary responsibility.

It has been our judgment that that level of staffing has been appropriate. We could always use more, of course, but the problem hasn't been in recent years the inability to get those cases to the Justice Department.

Mr. GORE. One final question—I intend to pursue that matter, incidentally, at a later time.

I ask you, Mr. Secretary, what portion of the $2.2 billion appropriation would go to alcohol fuels, and you replied that you are not sure at this point, or that you don't know.

What is your plan for spending that money, if you can give us rough percentages? How much more for synthetic fuels, compared to alcohol fuels? What do you plan to do with that $2.2 billion?

It is relevant to the progress of the conference committee decisions.

Secretary DUNCAN. It is very hard to give you any specific determination. I could give you notional determinations on that, just like the notional determinations that were given in the President's speech when he indicated what sorts of allocations would be made pursuant to the financial support given by the Energy Security Corp.

We have $200 million for the feasibility studies, and we had initial meetings on that in Denver, Colo., in January. We expect to be making decisions on that in March. I think that is the time frame.

But I would think in a very short period of time I can give you a better indication than I can now.

I will only say this as a general statement: I support the gasohol initiative. The gasohol initiative even preceded the $2.208 billion in the appropriation. We have organized in the Office of the Secretary of Energy some people who have been working the gasohol issue very hard, long before the Soviet invasion of Afghanistan. I think the target of 1 percent ethanol in unleaded gasoline or 10 percent of unleaded gasoline in the form of gasohol, to be producing at that rate sometime in 1981, is a realistic target, and I am inclined to do what I can to try to meet that goal.

The President set a target for domestic production capability of 500 million gallons during 1981. If this amount of ethanol were all blended to make gasohol, gasohol would then account for almost 10 percent of our anticipated 1981 demand for unleaded gasoline.

If that means using more funds to achieve that level, I am going to be trying to do it. That is a general and not a specific response. I apologize for not being able to be specific. It is a statement of commitment, though.

Mr. **Gore**. I understand. Thank you very much.

Mr. **Dingell**. The time of the gentleman has expired.

The Chair recognizes the gentleman from Texas, Mr. Loeffler, for 5 minutes.

Mr. **Loeffler**. Thank you, Mr. Chairman, and good morning, Mr. Secretary.

I would like to pursue the recent decision by the administration to postpone the administrative decontrol on the marginal production, which was to take a second phased jump in price, effective the first of this year.

I wonder if you might enlighten us as to why the decision was made and what consideration was given to the reduced amount of production we, as consumers, will have as a result of that decision?

Secretary **Duncan**. No. 1, I think the reduced amount of production was marginal. No. 2, there have just been some price actions in OPEC at the Caracas meeting in December that might make rather substantial increases in the price. No. 3, the windfall profits tax was not at that time making any particular progress.

Mr. **Loeffler**. How much production did we lose as a result of that delay?

Secretary **Duncan**. I think very little.

Mr. **Loeffler**. Do we have an exact figure or projection on it?

Mr. **Coleman**. I am not aware of any quantification of any delay. My suspicion would be we probably lost none.

Secretary **Duncan**. It would be difficult to understand how we lost any.

Mr. **Loeffler**. When are we going to get back on track with administrative decontrol?

Secretary **Duncan**. The President believes in pricing energy at its replacement cost; that is a fundamental element of his policy, as long as you move over an appropriate time frame so you don't have severe economic dislocation.

Mr. **Loeffler**. If there would basically be no change in the amount of production, then why did we delay the administrative decontrol action? Was it used as a carrot, in essence, to dangle in an attempt to secure a rather high windfall profits tax?

Secretary **Duncan**. I can't give you any precise judgment on that.

Mr. **Loeffler**. That was administration policy, not congressional policy.

Secretary **Duncan**. It was administration policy to have an adequate windfall profits tax; that is correct.

Mr. **Loeffler**. Both of us being from Texas, I can appreciate your position.

I would like to ask if you have any plans within the Department or within ERA to include in the marginal oil definition high water-cut oil that could be recovered as marginal oil. We do have it; we know where it is; and I believe during the last 2 years congressional intent has been clear that high water-cut recovery would also be included, and to date it has not.

I believe it is another step forward so that we might be able to have more oil available for all of us as consumers.

Ms. **Rollins**. Mr. Congressman, I am aware of the fact that ERA is often called upon to consider new tertiary recovery techniques. The rulemaking seems to be one of the more fluid things we did.

Mr. **Loeffler**. Might I just say, it is not tertiary, but secondary.

Ms. **Rollins**. My mistake. We will be considering that issue yet again in rulemaking that has been on my desk since the day I arrived at DOE. I will be getting to that as soon as I can.

Mr. **Loeffler**. I would be more than happy to be of whatever assistance I might from my personal involvement and that of my staff, because I do have figures that come, as I consider them, from hard facts in the State of Texas.

My final question, Mr. Secretary, do we have Alaskan oil that is now being sold to Japan?

Mr. **Loeffler**. No oil going to Japan at this time?

Secretary **Duncan**. Not to my knowledge.

Mr. **Loeffler**. Are there any plans for the administration to make such a recommendation?

Secretary **Duncan**. We have no such plans. I am aware that this is a matter of interest on the Hill. I have had a very cursory look at the economics of it, and it seems to me that the economics in some ways are rather compelling; but I am not aware of any plan to do that, and I am not aware of any actually moving that way now.

Mr. **Loeffler**. Going back to my original question about marginal oil, when do you anticipate going back on to the schedule of administrative decontrol?

Secretary **Duncan**. I would hope that that is not too long.

Lynn Coleman was just telling me that 80 percent of that is——

Mr. **Coleman**. Eighty percent of it moved to the upper tier price level last June, which was a very substantial increase.

Mr. **Loeffler**. The 20 percent is what I am looking at. I look at it from the standpoint of a policy determination. No time frame at the moment?

Secretary **Duncan**. At the moment, no.

Mr. **Loeffler**. Thank you, Mr. Chairman.

Thank you, Mr. Secretary.

Mr. **Dingell**. The Chair recognizes now the gentleman from Massachusetts, Mr. Markey.

Mr. **Markey**. Thank you, Mr. Chairman.

I want to compliment you on this statement. I think it was a really well-done comprehensive outline of the programs that you have, an outline that we are not very used to receiving from the Department of Energy, and I want to compliment you on it.

I would like to, if I could, briefly review the administration's policy on conservation, which you talk about in the text as being the most ready and economical source of energy for the next 5-year period.

We have as the Department of Energy's policies, low-income weatherization programs; we have loan programs which will be of some appeal to those in upper income groups who would want to participate; and we also have apparently the administration program, a $12 billion utility grant program which is in preparation right now and will be presented to the committee.

You speak in the text about the conservation programs that the Department of Energy has being tailored to the specific characteristics in needs of each energy-using sector of the economy.

What I have found, and I think others have come to realize, is that there is a major gap in the conservation program that you have. That is, that the tax credit program, loan programs, will not have any significant appeal to people who are in the lower middle income groups, that we do take care of the low income groups, that we do have programs that appeal to people who are making substantial amounts of money and can see conservation as a good investment and would be willing to participate in loan programs or tax credit programs.

I am concerned about that person who makes $13,000, $14,000, $15,000 a year with three kids, with a mortgage, a car payment, a kid in college trying to make ends meet with inflation running at 13, 15 percent eating up their discretionary income. Without some kind of direct grant program to that segment of the population; we will not reach a very large segment of the population which has the potential of making substantial conservation impacts in the country.

They will not be reached, but they will also be in the highest energy-inefficient dwelling units as well. Last year on this committee we lost a bill, 22 to 18, the administration being opposed to direct grant programs, a program that would be able to deal with renters.

They are not able to participate in any of those programs, and yet rental units—because the landlord is able to pass on the increased costs of energy to them—but yet the renter has no real vested interest in the proprietary interests in the property to make any improvements.

We find a substantial gap in the conservation efforts in the country as well.

I am wondering whether or not the administration has reconsidered its position in light of the statement that you have here, that you are developing programs to meet the specific energy conservation needs of the different income groups in the country and what kind of thought you have given to it.

Secretary DUNCAN. For lower-income people, we would, of course, move very quickly to give the $1.6 billion direct assistance.

Mr. MARKEY. I am not talking about low income. I am talking about the people in any area who just got a job, the guy that makes between $10,000 and $16,000, somewhere below the median income and yet above the poverty level. The bulk of the housing stocks occupied by homeowners are renters who are in that income category.

What can we do for them?

Secretary DUNCAN. We have the $300 tax incentive. We are moving with the DOE weatherization program in which we have made, in my judgment, substantial management improvements where we are now weatherizing in excess of 16,000 homes a month.

My recollection is that in the month of December it might have been 18,000.

We are focusing on the lowest-income people as opposed to middle-income people, as you know, but we are supporting the $6 billion conservation package on the Hill, which will involve loan subsidies.

Mr. **Markey**. But does not address the real——

Secretary **Duncan**. It does not have direct grants in it.

Mr. **Markey**. It does not deal with the real cash flow problem that people who are having to pay this additional $5 for food and $300 or $400 for gasoline this year are now trying to put together enough money so they can make the $1,000 investment in their homes which can reduce by 20 or 30 or 40 percent the amount of energy which their homes consume, or as a renter which their rental unit consumes, and there seems to be a very substantial gap in your program.

The market forces work for the people who earn $20,000, $30,000, or $40,000 a year, and they will take the loan interest or the tax credit that you offer them.

What the statistics reveal is that those income groups do indeed participate and make the kinds of needed improvements which their homes need, but the people that make under $16,000 don't participate in the tax credit program because it just isn't that attractive to them because they don't have that kind of discretionary income at all.

There would be little interest in a loan program because the additional financial burden on them, given the pressing economic circumstances in the country, doesn't make that too appealing to them.

They continue to go foward consuming this energy year after year, when if they had the initial upfront money given to them with some kind of post-audit program to show the money was spent on an insulation program, we could declare war on energy consumption in this country and begin to see some results instead of waiting for market forces to actually force this change in an eventual revolutionary way.

Are you philosophically opposed to grants as a means of dealing with this problem?

Mr. **Dingell**. The time of the gentleman has expired.

Secretary **Duncan**. I am sorry, Mr. Chairman.

Mr. **Brown**. Respond.

Mr. **Dingell**. Yes, sir.

Secretary **Duncan**. No; I am not philosophically opposed to grants. I do think that we have a program which is a very real program. Considering the $6 billion, the $300 tax credit, the other programs, including the one that we are working with CSA, and the improvements that we are now making in that program, I think we are making substantial progress.

Mr. **Markey**. Do you admit it doesn't reach that $10,000- to $16,000-a-year category?

Secretary **Duncan**. I have been to Boston and went through a large area of that city which seemed to need weatherization improvements.

Mr. **Markey**. That was a low-income area?

Secretary **Duncan**. Yes.

Mr. **Markey**. I agree with you.

Secretary **Duncan**. I have been into a dozen houses and talked to the people about the results they are getting; and they are getting very, very substantial results. I was very impressed.

Mr. **Dingell**. The time of the gentleman has expired.

The Chair recognizes the gentleman from Texas.

Mr. **Gramm**. I would like to talk about rationing and the triggers and begin by talking about the legislative history of the rationing bill.

Under EPCA, the first rationing proposal went to the floor of the Congress, and that proposal was defeated overwhelmingly. In the Senate, the Stevens resolution was attached to the program, which basically stated the sentiment of the Senate which was that these powers should be used only in a catastrophic shortage as defined by a 20-percent shortfall for 30 days or more.

As that defeat occurred on the rationing plan, the President basically took the attitude that the Congress should act. We had turned down the President's plan and, therefore, maybe it was up to us to come up with one. We met at the subcommittee level, talked about the plan, and we came up with what I conceive to be a good compromise.

I introduced the amendment at the committee level defining the circumstances under which rationing could occur. Those circumstances were a 20-percent shortfall for 30 days or more or a clear finding that such a shortfall was imminent.

That amendment went in at the subcommittee level. We had a broad coalition of support for not a rationing plan but a standby rationing plan to be used only under catastrophic shortage.

As you were aware, we were successful in the House, and we passed that provision by a good margin and there were three different attempts on the floor to either knock those rationing triggers out or to lower them. Those amendments were defeated by a more than a 3-to-1 margin. The bill has been signed into law.

Now the President talks about his desire to either eliminate those restrictions on Presidential powers or lower them, but yet we get contraditory signals. The President says he wants those things changed.

If indeed a policy has been initiated to lower the triggers, then I am no longer going to support the present program on rationing.

When I check it out with agencies of Government, I find no efforts have been made toward lowering the trigger, so what I would like to do is, one, to get a clarification.

Is there going to be an effort from the administration to convert the standby rationing authority that the Congress enacted into a rationing authority by lowering the triggers from 20 percent or 5 percent or to zero?

Secretary **Duncan**. The President has been very clear on that point. He would like to see the trigger lowered. We have taken readings of attitudes on the Hill, and my reading, and what I am told by my associates, is that there is no sentiment for reducing that on the Hill.

Mr. **Gramm**. So it would be your understanding now that there would be no effort by the administration at this time?

Secretary **Duncan**. I think the administration would like to see the trigger lowered.

Mr. **Gramm**. Well, Mr. Secretary, I would like before passing on to another question to point out that we had a long series of hearings. Throughout those hearings it was made clear both by individuals outside Government and people within the Department of Energy that in rationing we were talking about a very difficult allocation problem, that we were talking about $2 billion a year which Ms. Rollins in an excellent presentation to this committee indicated could even be on the low side.

We are talking about hiring many bureaucrats imposing a program that could not possibly be equitable, and it was on that basis that this committee and finally the Congress decided that we wanted a rationing program on the shelf, but we wanted to assure that that program was not used unless there were no viable alternatives and, in fact, we passed a conservation program which gave the President a wide range of conservation tools to be used at levels below 20 percent.

I think that represented a reasonable compromise. Personally, I am hopeful that that compromise can be kept in effect.

Secretary **Duncan**. I support what Ms. Rollins said to you. I think a rationing plan is administratively complex. It is terribly expensive and extremely difficult to administer with any degree of equity, and I have likened it to open heart surgery. It is the kind of thing you think about a long time before you do it.

If you move into a situation where you have a substantial shortfall, then I think we would have to move into a rationing program of some other form of demand constraint that could be a fee on gasoline or some other form.

It could be a limitation on imports, but I find a gasoline rationing plan rather at the lower end of the options that I think I would be recommending. To have more flexibility in such a plan on a standby basis, where you don't have to reach a 20-percent target in order to have a Presidential option to implement the plan, I think is reasonable.

I don't see them as inconsistent.

Mr. **Gramm**. I appreciate your views, Mr. Secretary, and they are comforting to me, because I think your analogy to open heart surgery is correct, but there are a lot of people in this country who view rationing as a quick fix for our problem, and I think those people basically don't understand what we are talking about.

Secretary **Duncan**. Absolutely. There are people who think that rationing is an alternative to price. People tend to say you have rationing by price or you have rationing by some bureaucratic system, and people tend to equate that as an option.

But the fact of the matter is that price is going to advance irrespective of any rationing plan, and the reason it is going to advance is because we don't have any control over the supply or the cost of imported oil for which we are and will continue to be for years very highly dependent.

So it is not a matter of having an option of price increases when you go to rationing. To the extent that crude oil impacts on the cost of gasoline, if crude oil goes up the price of gasoline is going to go up with or without a rationing plan or any other form of demand constraint mechanism.

Mr. DINGELL. The time of the gentleman has expired.

Mr. GRAMM. Thank you, Mr. Secretary.

Mr. DINGELL. The Chair would just observe that I have heard repeatedly indications from the administration, as well as from without, that it would be desirable for this Nation to go immediately to some kind of rationing plan or some change in our statutes relative to rationing.

It is the view of the Chair that changes of basic statutes we happen to have at this time relative to standby authority for rationing are fraught with enormous difficulty.

Replacement with other statutes would take an enormous amount of time of this subcommittee and consume energy and effort here and in the administration that probably is better devoted to other things, because I can't give you any assurance we can get as good a law as we got you the last time.

We have already spent considerable time on the present statute. The Chair is also aware of the fact that the framing of a rationing plan is fraught with enormous difficulty, and your agency has done considerable work to frame an initial standby plan. If we do change our policies and pass new statutes we will cast doubts on the validity of the work already done. This may cause a redoing of the plan and loss of taxpayers' money. This may lead to a set of circumstances where there would be a slow-down on the implementation of existing standby rationing legislation.

I think that all of those steps would be unwise, and the more I reflect on the matter the more I view that the action that was taken by the Congress, in large part due to the leadership of the gentleman from Texas, Mr. Gramm, was probably wise and probably as much as we can have of this type.

Now, that comment is not made by way of criticism toward you, but on the record leaves no doubt of the views of the chairman of the subcommittee of the gentleman from Texas.

He has providod services and work of great esteem on this particular matter.

The gentleman from Ohio, Mr. Brown, wanted to ask one question.

Mr. BROWN. Thank you very much, Mr. Chairman.

I want to ask one other question of the Secretary so as to draw something to his attention.

Under the President's utility oil backout proposal now being considered in the Department, utilities would receive subsidies to convert from oil to coal.

The utilities for the most part use residual oil to generate electricity. They do not burn gasoline or middle distillate oils. When refiners produce gasoline or middle distillate oils, a certain amount of residual fuel oil results as a byproduct under the present setup in most refineries.

Only a small part of this residual oil can be further refined into gasoline or middle distillates, because residual oil is a byproduct and, therefore, the savings in the reduced consumption of residual oil by the proposal to buy off oil used to convert utilities to coal or some other source may not be the most logical proposal available on this subject.

The fact of the matter is we now have a greater surplus in residual oil than you have in gasoline or in middle distillates. What I am suggesting here is that you look at the real supply of utility-grade oil before you enter into a program that is going to leave you with residual oil in massive surplus for which there is no other purpose.

Clearly, there can be some adjustment to the refineries in the future that would give you a little bit more gasoline and a little bit more middle distillate oil out of that residual oil, but it is an area that I think you ought to be alert to before you move to make a fundamental decision that may not be quite appropriate.

You may want to comment.

Secretary **Duncan**. Mr. Brown, I am aware of the issue as well as the buildup of residual inventories around the country.

I was pleased to note that a large refinery, the name which escapes me at the moment, is making a substantial investment in order to crack that residual into more usable products. It does take a significant investment.

My understanding of the technical issue is that though it will require additional investment, the statement that only a small part of it can be used would not be accurate if you were to make those investments and have further cracking of the residual.

Mr. **Brown**. The question really is the length of time to make the investments.

Secretary **Duncan**. Fine; I accept that. There is a time equation involved, of course, as well as the financial aspects of having to make the investment; but it is imperative in the interests of the country that we discontinue burning oil in any form in these utilities. To the extent that causes people to invest in cracking capacity to do something with the residual which will make it usable for other purposes, it is in the national interest.

Mr. **Brown**. I urge you to look at the economics and the time frame of that decision before you get into the program. It may not be productive.

Thank you, Mr. Chairman.

Mr. **Dingell**. The Chair thanks the gentleman.

The Chair will now recognize the gentleman from Massachusetts, Mr. Markey.

Mr. **Markey**. Thank you, Mr. Chairman.

I would like to come back to that conservation issue again. The income category that I am talking about, Mr. Chairman, is that which is between the working class people in the country and, as admirable as the low-income weatherization program is, if it works, and as admirable as the tax credit of the low-interest loan program may be, and it will have some effect on the above average income groups, there is a substantial percentage of people who live in rental units who cannot take advantage of the tax credit, the loan program, the low-income weatherization program.

They don't have the opportunity of being able to participate in them, yet they still live in rental units that are for all intents and purposes consuming millions of barrels of oil beyond what they have to, and no effective program from the administration has been forthcoming which would be in some way directed toward them that would make it possible to have an effective conservation program.

The same is true when talking about people who are homeowners in that $10,000 to $16,000 a year range, and what I am talking about is people who live in Boston in two, three, four, five and six-family homes who are effectively not included at all in any of the conservation programs which the administration has offered, not that they couldn't theoretically qualify for a low-interest loan or qualify for a tax credit, but that in effect because of the body blow that the inflation situation in this country has hit them with that they just are not going to participate.

The experience has been documented in Canada. Our own limited experience has shown a very great lack of interest in it, but what I am doing is trying to encourage you to reconsider the adamant opposition that you had to the policy, that the effort last year with the administration to essentially take the Republican minority on this committee and put together a few Democrats to be able to keep back the efforts we had to oppose or implement a grant program and to look at that seriously as an area in the short term can back up a substantial amount, hundreds of thousands of millions of barrels of oil.

It really does greatly disturb me that you have not been able to address that income group, which is the predominant income group in my district, and will not be able to participate in any of the programs you are offering.

In the windfall profits tax conference right now they are seriously considering using the vast bulk of that money for tax cut. Is the administration prepared to, out of general revenues, fund the conservation and solar programs which you propose, even if the money is not there, using the windfall profit tax mechanism as the funding root to give those programs the kind of boost that they need?

Secretary DUNCAN. We think those should be funded from the windfall profits tax. We are hopeful that they will be funded from the windfall profits tax.

I am not aware of the precise detail of how the conference is moving at the moment, but I would certainly hope, and I hope I can say accurately, they will be funded by the windfall profits tax. That is the pool of money that ought to be used for that purpose.

Mr. MARKEY. It ought to be, but if it is not, are you still committed to those conservation and solar programs?

Secretary DUNCAN. What I am going to do is to work hard to get them funded by the windfall profits tax.

Mr. MARKEY. In your Office of Conservation and Solar Energy under Assistant Secretary Stelson, as solar under Mr. Miller and conservation under Dr. Savitz, and former Assistant Secretary Walden is described as your solar conservation commercialization advocate.

Now, I have seen the offices work independent of one another in project development. As the new DOE Secretary working to improve DOE's efficiency, could you explain to me how you hope to see solar and conservation technologies commercially in a more deliberate and dedicated cooperative effort between those various people, as many predecessors have not been able to work?

Secretary DUNCAN. Assistant Secretary Stelson is here, and he can answer for himself.

Ms. Walden is working directly with me on the commercialization aspect, and I am asking her to work directly with me to give some personal emphasis to that.

She has a very close relationship with Assistant Secretary Stelson, and I might add that relationship for many years preceded their current employment in the Department of Energy. They are both from Georgia and worked together in Georgia.

When Mr. Stelson was with the State, she was the State's energy counsellor and he was chairman of a committee or something.

Why don't you respond to Mr. Markey?

Mr. STELSON. The question is a very important question, and conservation and solar energy fit very closely together.

There is no good solar energy program that does not have a heavy conservation involvement. In the reorganization we are working hard to do exactly what you suggest, bring together conservation and solar energy in a very intimate relationship. I might also add we are working to bring conservation together with other fuel taxes, because it interacts with oil and gas and so on as well.

In the new organization there are four Deputy Assistant Secretaries, in addition to the two that you mentioned, Dr. Robert San Martin has a special responsibility for the regional solar energy centers and SERI.

Those are large important institutions with special emphasis on commercialization, particularly in the regional solar energy centers, and the reason for the increased emphasis on managerial concern is to make them more effective in doing exactly what you suggest.

Mr. DINGELL. The time of the gentleman has expired.

Before the Chair recognizes staff for purposes of asking questions, the Chair does wish to address a couple of housekeeping matters that are of importance to us in terms of moving the legislative process forward.

As you will recall, Mr. Sharp expressed some concern about the fact that we have been getting caught both in the appropriation process and the budgetary process with the Budget Committee, and we wind up getting caught in the Senate.

It is our goal to avoid that at all costs. Toward that end, Mr. Secretary, it is the practice, as you know, that the Department submit to the subcommittee its authorization legislation, and I assume you will be doing likewise with our sister committees that deal with these questions.

The Chair requests that you present those documents and that information to us, together with the necessary draft of the legislation, at the earliest possible moment.

I am advised that this is now held in the Office of Management and Budget.

If that, in fact, is so, Mr. Secretary, I hope that you will see to it that it is removed from the hands of OMB and submitted to the committee's jurisdiction at the earliest possible time, and if you are not able to do that, submit it to this subcommittee as a drafting service as opposed to submitting it to the OMB, and then after they release the matter we will take a fresh look and see how your requests differ from the requests of the OMB.

I don't want you to feel that this is anything different than what we would ask for, because we would want to know what the requests to the Office of Management and Budget were in any event, so we could compare your requests with what they have recommended you should receive, which I think is an important part to the legislative oversight of this subcommittee.

So it would be the hope that we would have that in hand at the commencement of next week so the necessary processes of the subcommittee could commence at that time.

Mr. Secretary, further, the Chair would like to advise that it is the hope of the Chair, and the firm determination of the Chair, that we will deal within this authorization bill only with matters which will relate to the budget of that fiscal year, and it is the specific request of the Chair that your authorization bill to this subcommittee at least not include any matters which would go beyond the end of the fiscal year for which the authorization is requested.

There are some very good reasons for that. It will expedite the dealing with the budgetary process and avoid a number of unfortunate side issues that might otherwise creep into the business of the committee as it processes the legislation.

With that, Mr. Secretary, I want to commend you again and also your associates for your very helpful and careful testimony this morning, and the Chair will now recognize Mr. Schooler for questions.

Mr. SCHOOLER. Mr. Secretary, last week we discussed the issue of gasoline rationing and the funding for that program.

Ms. Rollins' testimony indicated that a gasoline rationing plan, given added resources, could take from 7 to 12 months to implement.

We also discussed the fact that there is a pending supplemental of $43 million. However, your fiscal year 1981 budget had slightly over $4 million total for all emergency preparedness.

Is the fiscal year 1981 amount, plus the pending supplemental, enough resources to insure that the rationing program would be available for implementation at the earliest possible time, or will it take more than the pessimistic forecast of over 12 months to implement?

Secretary DUNCAN. I have gone into this issue in the last 2 days, and I will let Hazel respond to that.

Ms. ROLLINS. When the budget was submitted in the fall, those numbers, as I indicated last week, of course, were in our best estimate correct. As we have now taken another look at those figures and placed them side by side with this latest proposal, we are not certain that those numbers are correct, as I indicated to you last week.

We are working as fast as we can to revise the numbers, and as soon as they have been through the process that they must go through we will be sharing them with you immediately.

Secretary Duncan. I think the question is a valid question, and I am concerned about it.

Mr. Schooler. Would it be your intention to request funds so that the rationing program would be available for use within, say, 6 months of congressional approval of the plan?

Secretary Duncan. I will let Hazel comment on this. I don't think this has as much to do with the accelerated time frame as with the cost of doing what we have to do.

Isn't that accurate?

Ms. Rollins. Yes, and the other thing I would add is that my view is that we would probably come foward and add another supplemental request when our numbers are firm.

Mr. Schooler. From the perspective of this subcommittee, the time to be making this kind of budgetary request would be now, while the subcommittee is still considering this authorization bill. I would urge you to do it at that time.

The pending supplemental also included a request for dollars to purchase printing presses over at the Bureau of Engraving and Printing and for the printing and serialization of coupons.

Is it still your intention to use the supplemental moneys for rationing and serializing existing coupons?

Secretary Duncan. I will defer to Hazel.

Ms. Rollins. The supplemental figures which I will provide later today include a number of options.

Serializing is one option. On the request for equipment for the Bureau of Printing and Engraving, that supplemental does not cover such equipment and, moreover, I am most recently informed that it may not be necessary to purchase additional equipment.

We are working very closely with the Treasury on that issue, and I am almost willing to say they may be ready to go forward without equipment.

Mr. Schooler. Mr. Secretary, one final issue on rationing and a more generalized issue with regard to decontrol.

As you know, at the end of fiscal year 1981, EPAA will expire. This includes price controls, allocation controls, and rationing authorities. Given the fact that the rationing plan may not be ready to be used until sometime in 1981, are you giving consideration to what kinds of authorities would be required after the expiration of EPAA, both in the area of rationing and price and allocation controls generally?

Can you give us an idea of where you may stand on that issue now?

Ms. Rollins. We are giving a great deal of thought to it. I am not in a position to tell you any more this week than I was last week, simply because these are profound issues which deserve care and attention.

Mr. Schooler. I thought perhaps maybe somebody outside of ERA, for example, your Policy Office, might be considering the matters, or that the Department itself might have a position on that issue.

Are you stating it that nobody in or outside of ERA is considering this issue?

Secretary DUNCAN. I would expect P. & E. is considering that. I think it is a valid question, and I will come back to you with a more precise response.

Mr. SCHOOLER. Thank you, Mr. Chairman.

Mr. DINGELL. The Chair recognizes Mr. Finnegan of the staff for questions.

Mr. FINNEGAN. Thank you.

Mr. Secretary, in connection with the budget books that have been presented to us, there is an indication that in the Office of Consumer Affairs there would be a reduction of $110,000 in citizen participation projects.

Can you or somebody on your staff provide us information as to what that is, and why it was being reduced, or provide them for the record?

Mr. DEUTCH. Mr. Finnegan, I am not familiar with any specific $110,000 reduction in the Office of Consumer Affairs. I believe the total budget for the Office of Consumer Affairs went up, and there is no intention of curtailing previous types of activities that were underway.

Mr. FINNEGAN. Thank you.

During the consideration of earlier authorizations we, the subcommittee, have had the Justice Department here in connection with enforcement matters, and the problem of a memorandum of understanding that was entered into between the Department and the Justice Department utilizing attorneys of the Justice Department in various programs, particularly enforcement.

Now, that summary type memorandum was anticipated to be executed between the two agencies regarding the Fuel Use Act, recognizing that there is a possibility of considerable amount of litigation under that statute.

I notice Mr. Coleman is here, and I wonder what the status of any negotiations with the Justice Department might be regarding that memorandum.

Mr. COLEMAN. We have had discussions with the Assistant Attorney General for the Lands and Natural Resources Division, who has been assigned the responsibility at Justice for cases arising under the Fuel Use Act.

We have thus far not been able to conclude a memorandum of understanding with the Justice Department relative to the handling of those cases.

I would, in all candor, have to tell you that the Justice Department would perhaps take a different view of their responsibilities under the Fuel Use Act than I might and, as I take from your question, that you would.

It so happens when we get through here today I will be meeting with Mr. Shenefield, the Associate Attorney General, and we are going to push very hard to get an acceptable memorandum of understanding because we believe it is an efficient use of lawyers, and to have a significant role played by the Department of Energy enforcement lawyers in those kinds of cases.

I am hopeful the end product of these discussions will be an acceptable memorandum of understanding.

Mr. FINNEGAN. You will be coming to testify later next week, and I hope that perhaps you will be able to give us better information than that.

We would like to know, because if Justice is resisting that we may want to have Justice testify at the same time.

Isn't it correct that there was an overall study of this matter conducted through the auspices of OMB, and there was a draft which I understand has been a selected draft which is pending at OMB which indicated the use of departmental attorneys for this sort of matter, and it is something that OMB is somewhat favorable to?

Isn't there such a study that you are aware of? I am told there is.

Mr. COLEMAN. I believe that is correct, and I believe your characterization of it is correct also.

Mr. FINNEGAN. Ask the Justice Department, OMB, to provide us with a copy of that study. We would like to have it before next week.

Mr. COLEMAN. Let me see what I can do.

Mr. FINNEGAN. In that connection, earlier Mr. Gore raised some issues about expediting actions in various cases at the Office of Hearings and Appeals.

Our staff has recently heard, however, that the orders to the Director of Administration not to process hiring forms for OHA, that these orders came from an aide at your office, and I wonder what the status of that is, and why that order was issued and what the status of it is at the present moment.

Secretary DUNCAN. I went into that yesterday. There was not a freeze on hiring. There was a substantial disagreement as to what people going on the staff were to do. We have been very anxious to do what we can to get down the number of cases that are in the backlog in OHA.

I think Mr. Goldstein has made some progress in that respect. He has authorized 211 people on the staff; 173 people are presently on board, leaving the deficiency in personnel that you talk about.

He and Mr. Hewitt have worked out an understanding as to how those people will be applied. There is no further issue, it is my judgment, between Mr. Goldstein and Mr. Hewitt, and they all related to having a collective judgment as to how best to accelerate the processing of those cases.

The issue, as far as I know, in a management sense, is resolved. There is no hiring freeze.

Mr. FINNEGAN. We are going up to 211?

Secretary DUNCAN. That is my expectation.

Mr. FINNEGAN. Because we are concerned about the Office of Hearing and Appeals and Members have expressed some concern about the matter.

Secretary DUNCAN. I am also concerned, and that is the reason I asked Mr. Hewitt to involve himself in what we can do to accelerate the review of those cases.

He and Mr. Goldstein, as I understand it, have no outstanding issues at the moment.

Mr. FINNEGAN. You will probably want to talk to both of them about the backlog and what the procedures are so we can deal with this when we come to markup session, if necessary.

Those are all the questions I have, Mr. Chairman.

Mr. DINGELL. Mr. Secretary, this hearing appears to be something of a milestone in that we have completed it at 10 minutes to 12.

That is a record that this committee has yet to achieve.

I think it is probably due to the very fine testimony, the job you did this morning, and also the very complete testimony and preparation that you have given the committee in your statement.

We do thank you and your associates.

The subcommittee stands in adjournment subject to the call of the Chair.

[The following response to subcommittee questions was received for the record]:

URANIUM ENRICHMENT AND URANIUM RESOURCE ASSESSMENT

RESPONSES TO QUESTIONS RAISED IN REPRESENTATIVE DINGELL'S

LETTER OF JANUARY 16 TO SECRETARY DUNCAN.

Uranium Enrichment

Q.1. Please provide charts which identify:

(a) the total annual production from existing uranium enrichment plants from Fiscal Year 1968 through Fiscal Year 1979;

(b) the planned production of SWU's through 1990 under the Fiscal Year 1981 budget request, compared with the planned production under the (i) Fiscal Year 1978, and (ii) the Fiscal Year 1980 request;

(c) the projected size of the enriched uranium stockpile through 1990, under the Fiscal Year 1981 budget request, compared with the projected stockpile anticipated under the (i) Fiscal Year 1975 budget request, (ii) the Fiscal Year 1978 budget request, (iii) the Fiscal Year 1979 budget request, and (iv) the Fiscal Year 1980 budget request;

(d) the present projected cascade power requirements needed to operate all uranium enrichment facilities through 1990 under your Fiscal Year 1981 projected production schedule as compared with the projected cascade power requirements through 1990 as forecast in each of the following fiscal year budget requests (i) 1978, (ii) 1979, and (iii) 1980;

(e) the projected production schedule as compared with your most recent estimate of demand under the terms of existing contracts;

(f) the historical change in the charge for enrichment services for each type of supply contract;

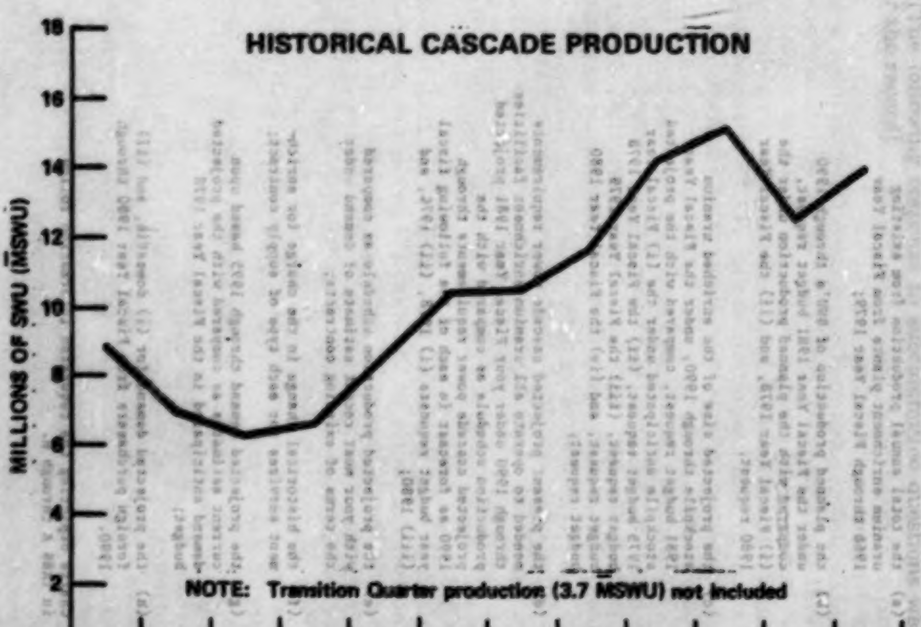
(g) the projected demand through 1995 based upon current estimates as compared with the projected demand anticipated in the Fiscal Year 1978 budget;

(h) the projected demand for (i) domestic, and (ii) foreign purchasers from Fiscal Year 1980 through 1990.

A.1. Charts depicting the requested information follow in TABS A through H.

TAB A

HISTORICAL CASCADE PRODUCTION

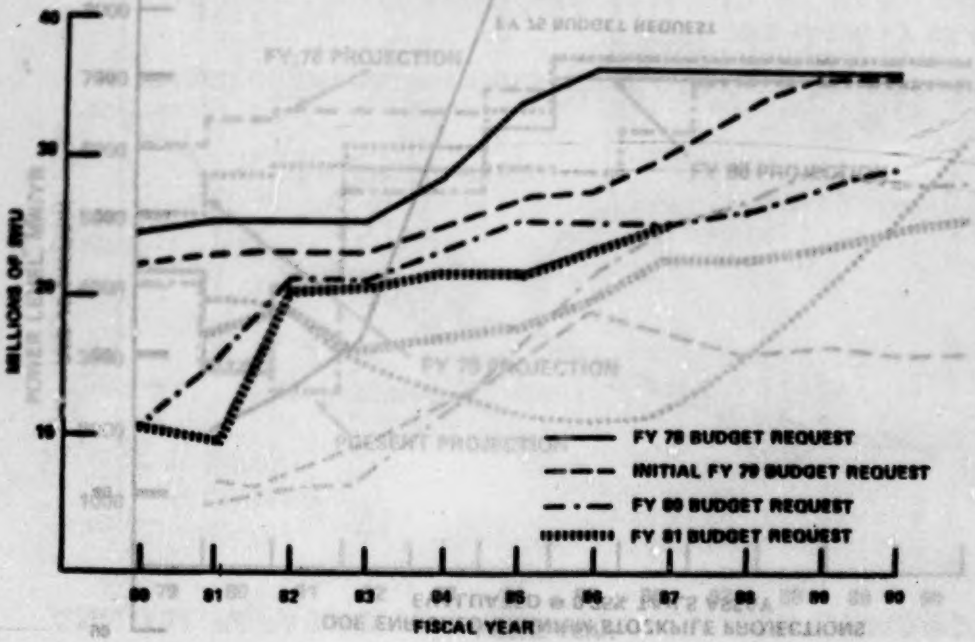


NOTE: Transition Quarter production (3.7 M̄SWU) not included

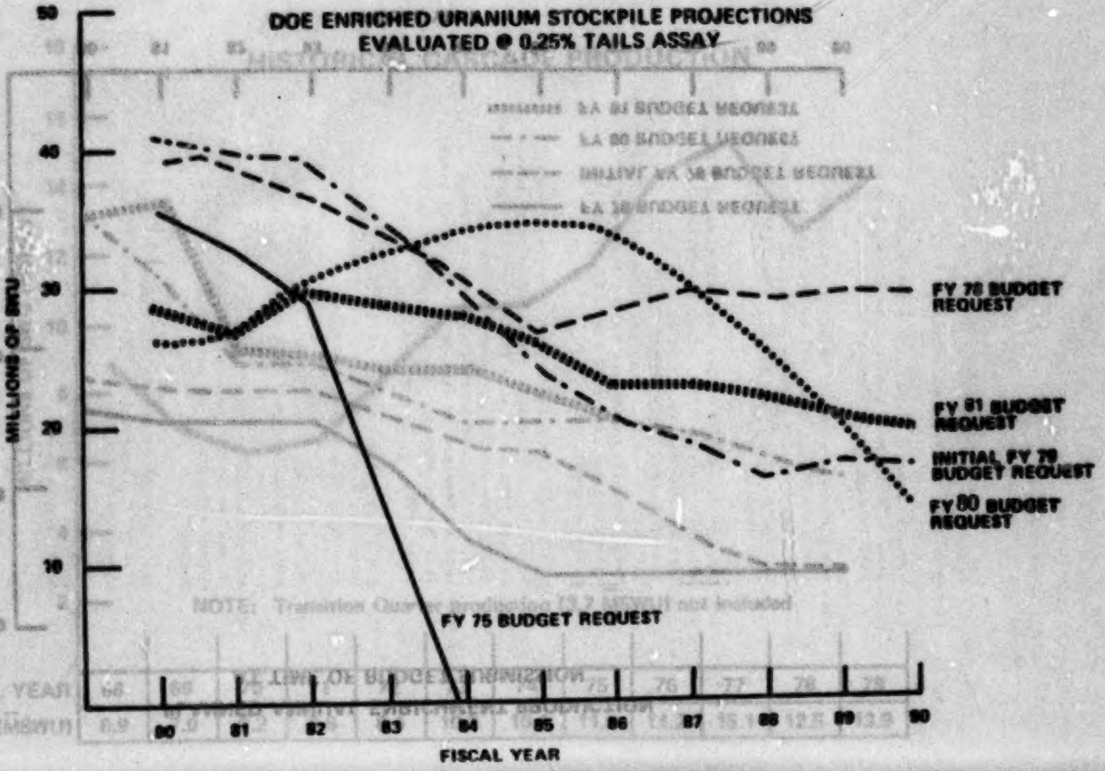
FISCAL YEAR	68	69	70	71	72	73	74	75	76	77	78	79
PRODUCTION (M̄SWU)	8.9	7.0	6.2	6.6	8.4	10.3	10.4	11.6	14.2	15.1	12.5	13.9

TAB B

PLANNED ANNUAL ENRICHMENT PRODUCTION
AT TIME OF BUDGET SUBMISSION

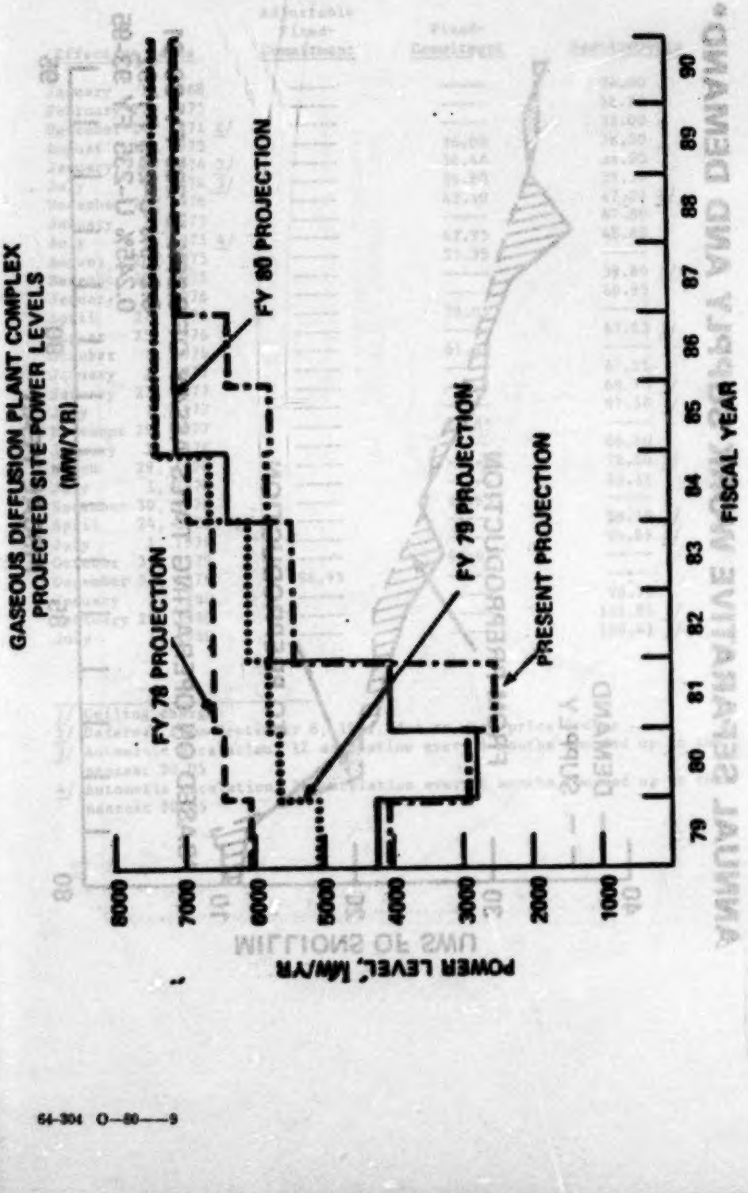


TAB C



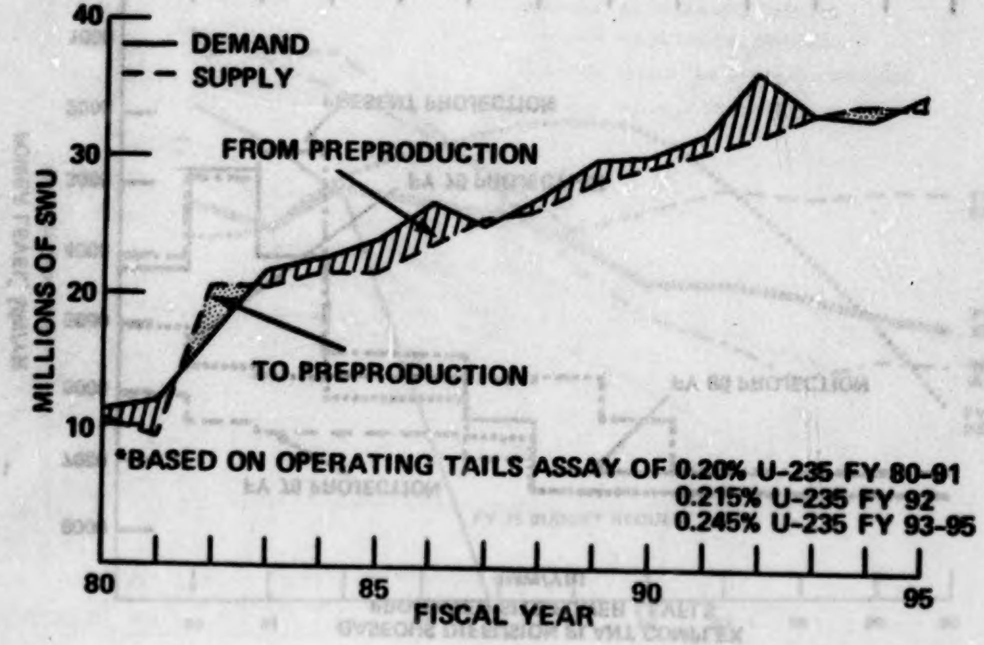
DOE ENRICHED URANIUM STOCKPILE PROJECTIONS
EVALUATED @ 0.25% TAILS ASSAY

TAB D



GASEOUS DIFFUSION PLANT COMPLEX
PROJECTED SITE POWER LEVELS
(MW/YR)

ANNUAL SEPARATIVE WORK SUPPLY AND DEMAND*



*BASED ON OPERATING TAILS ASSAY OF 0.20% U-235 FY 80-91
0.215% U-235 FY 92
0.245% U-235 FY 93-95

HISTORICAL URANIUM ENRICHMENT SERVICE CHARGES

In $ per SWU

Effective Dates	Type of Contract Adjustable Fixed-Commitment	Fixed-Commitment	Requirements
January 1, 1968	-----	-----	26.00
February 22, 1971	-----	-----	28.70
November 14, 1971 2/	-----	-----	32.00
August 14, 1973	-----	36.00	38.50
January 1, 1974 3/	-----	36.40	38.90
July 1, 1974 3/	-----	36.80	39.30
December 18, 1974	-----	42.10	47.27 1/
January 1, 1975	-----	-----	47.80
July 1, 1975 4/	-----	42.95	48.80
August 20, 1975	-----	53.35	-----
December 18, 1975	-----	-----	59.80 1/
January 1, 1976	-----	-----	60.95
April 27, 1976	-----	59.05	-----
August 25, 1976	-----	-----	65.83 1/
October 1, 1976	-----	61.30	-----
January 1, 1977	-----	-----	67.25
January 27, 1977	-----	-----	69.75 1/
July 1, 1977	-----	-----	67.58 1/
November 29, 1977	-----	74.85	-----
January 1, 1978	-----	-----	69.80
March 29, 1978	-----	-----	78.20 1/
July 1, 1978	-----	-----	83.15
December 30, 1978	-----	88.65	-----
April 24, 1979	-----	-----	89.19 1/
July 1, 1979	-----	-----	95.09 1/
October 31, 1979	-----	98.95	-----
December 31, 1979	98.95	-----	-----
January 1, 1980	-----	-----	98.30
February 29, 1980	-----	-----	101.81 1/
July 1, 1980	-----	-----	108.41 1/

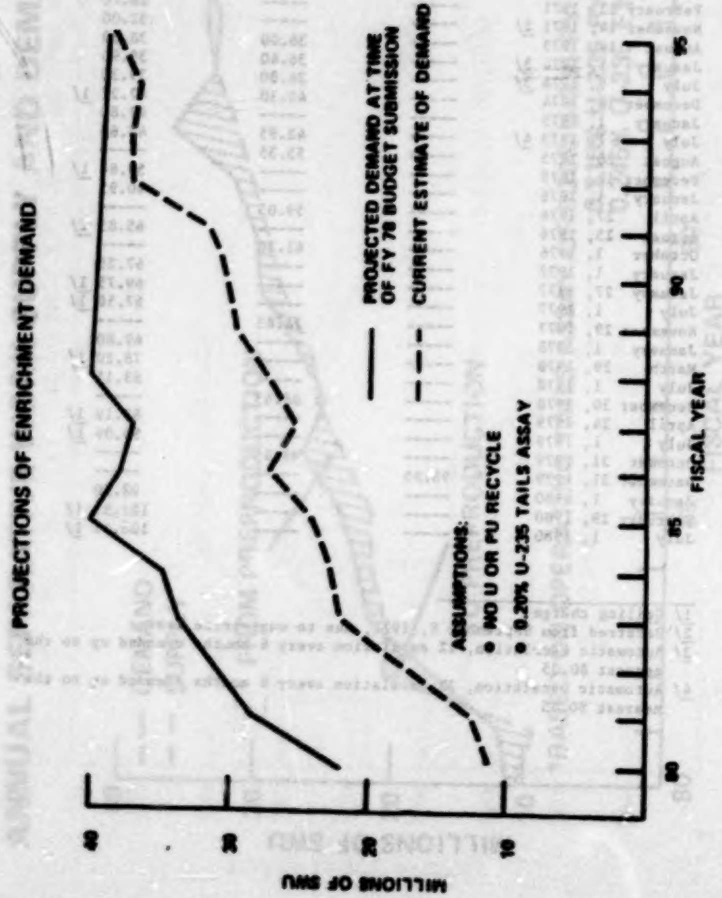
1/ Ceiling charge

2/ Deferred from September 6, 1971, due to wage-price freeze

3/ Automatic escalation, 1% escalation every 6 months rounded up to the nearest $0.05

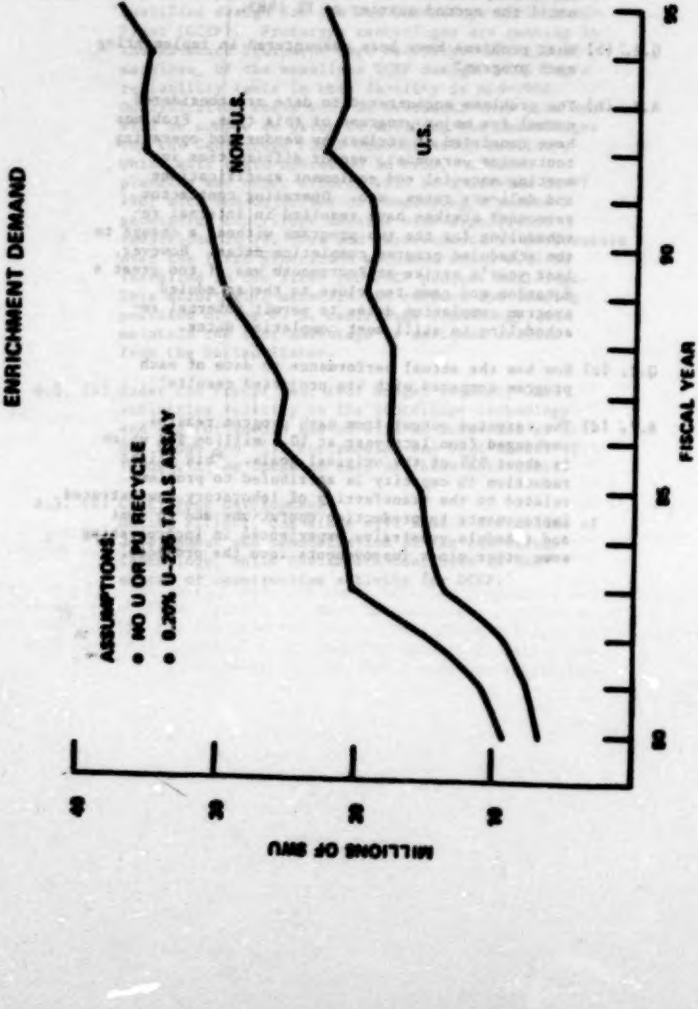
4/ Automatic escalation, 2% escalation every 6 months rounded up to the nearest $0.05

TAB G



PROJECTIONS OF ENRICHMENT DEMAND

TAB H



ENRICHMENT DEMAND

Uranium Enrichment

Q.2. What is the present status of the Cascade Improvement Program and the Cascade Uprating Program?

A.2. As of the end of the first quarter of FY 1980, approximately 77% of the total stages scheduled to receive new improved barrier had the new barrier installed. Approximately 68% of the total stages scheduled to be uprated were completed. Both programs are expected to be completed within the currently authorized funding.

Q.2. (a) When is completion of each program anticipated?

A.2. (a) Both programs will be completed at Oak Ridge and Paducah by the end of FY 1981 as scheduled. However, due to a strike at the Portsmouth Plant during FY 1979 and FY 1980 that lasted for 227 days, completion of the programs there have slipped until the second quarter of FY 1983.

Q.2. (b) What problems have been encountered in implementing each program?

A.2. (b) The problems encountered to date are considered normal for major programs of this type. Problems have consisted of strikes by vendor and operating contractor personnel, vendor difficulties in meeting material and equipment specifications and delivery rates, etc. Operating contractor personnel strikes have resulted in internal rescheduling for the two programs without a change to the scheduled program completion dates. However, last year's strike at Portsmouth was of too great a duration and came too close to the scheduled program completion dates to permit internal rescheduling to still meet completion dates.

Q.2. (c) How has the actual performance to date of each program compared with its projected results?

A.2. (c) The targeted output from each program remains unchanged from last year at 10.1 million SWU which is about 95% of the original goals. This slight reduction in capacity is attributed to problems related to the transferring of laboratory demonstrated improvements to production operations and to cost and schedule constrains experienced in incorporating some other minor improvements into the projects.

Uranium Enrichment

Q.3. What is the current schedule for the construction, operation and completion of the Portsmouth Gas Centrifuge Enrichment Plant?

A.3. Construction of the Gas Centrifuge Enrichment Plant (GCEP) is proceeding consistent with the current schedule. Startup of the first train of centrifuge machines is scheduled for 1984 with completion of the First Process Building in 1987. Completion of the Second Process Building is planned for 1988, which will provide a total GCEP separative capacity of 2.2 million Separative Work Units (SWU) per year. Completion of the remaining six buildings will be based on demand.

Q.3. (a) What is the present status of the Centrifuge Enrichment Technology Development Program?

A.3. (a) The development program is on schedule to provide a qualified design for the Gas Centrifuge Enrichment Plant (GCEP). Prototype centrifuges are running in the Advanced Equipment Test Facility. Additional machines, of the baseline GCEP design, will begin reliability tests in this facility in mid-1980. Qualification tests will be initiated this year and will be completed prior to building the centrifuges for the Centrifuge Plant Demonstration Facility, which will begin operation in 1982. Advance planning and other efforts will be initiated in FY 1981 with the objective of developing a second generation centrifuge machine with significant reductions in SWU cost and improvements in performance over the first generation machines which will be installed in the first two GCEP process buildings. This effort will maintain and enhance the leading position of the U. S. centrifuge technology, and maintain the cost advantage of enriched uranium from the United States.

Q.3. (b) Under the Fiscal Year 1981 budget request, what activities relating to the centrifuge technology and the Portsmouth add-on will be conducted at (i) Oak Ridge and (ii) Portsmouth, and what amount of funds will be spent on each of these activities?

A.3. (b) Centrifuge Development

During FY 1981, Oak Ridge will remain the center of development and demonstration of the centrifuge technology, while Portsmouth continues as the center of construction activity for GCEP.

A.3. (b) (Cont'd)

Centrifuge technology activities at Oak Ridge include operation of existing facilities such as the pilot plant cascades and the reliability test facility; support for construction projects designed to provide capability for testing and qualification of the GCEP centrifuge, e.g., the first production machine will be received and installed in the Centrifuge Plant Demonstration Facility during FY 1981; plus investigation of the potential for improved centrifuge performance. Of the $64,000,000 requested for process development and demonstration, approximately $35,700,000 will be spent in Oak Ridge, and about $710,000 will be spent in Portsmouth. Development funds spent in Portsmouth provide for advanced planning, engineering studies, and other activities in preparation for the eventual operation of GCEP. The balance of the $64,000,000 will be spent in other States and will provide for a continuation of current program tasks performed by various participants in the centrifuge program.

Gas Centrifuge Enrichment Plant (GCEP)
The table below provides a breakdown of the GCEP FY 1981 budget appropriations for Oak Ridge and Portsmouth that will support the GCEP activities.

GCEP Appropriations
(Millions of FY 1981 Dollars)

	Oak Ridge	Portsmouth
Engineering	60	5
Technical Support	44	3
Construction	7	120
Procurement	80	0
	191	128
Total	319	

Oak Ridge and Portsmouth will distribute this money to the suppliers of services and equipment that are located primarily in four states. Of the $319 million in FY 1981 GCEP appropriation, approximately $149 million will be spent in Ohio, $100 million in Tennessee, $50 million in California, and $20 million in Washington, with various amounts flowing to numerous subcontractors throughout the United States.

Q.3.(c) What delays have been encountered in completing the Portsmouth Gas Centrifuge facility, and what are the causes of the delays?

A.3.(c) The Portsmouth Gas Centrifuge Enrichment Plant (GCEP) is proceeding on schedule. Process Building No. 1 steel erection is scheduled to begin in March 1980, consistent with the planned schedule for completion of Process Building No. 1 in 1987. The other GCEP facilities are also proceeding on schedule.

Q.4. What is the present operating status of the Portsmouth Diffusion Plant?

A.4. Operations at the Portsmouth Plant have returned to normal following the settlement of the Oil, Chemical, and Atomic Workers (OCAW) strike in mid-December.

Q.4. (a) What affect did the strike at this plant have upon (i) production, (ii) operating efficiency, and (iii) costs?

A.4. (a) The strike had the following effect:

(i) Production: Separative work production was impacted in three basic categories as follows:

- **Deferred maintenance (54,000 SWU) - Shortly after the strike began, the plant operator, Goodyear Atomic, was directed by DOE to limit cascade maintenance activities to only essential maintenance. Repairs to cascade equipment solely for the purpose of maintaining a high level of separative work output were discontinued as of June 1, 1979. The only acceptable justification for repairs to the uranium-containing process system was one of maintaining essential equipment only. As a result of this philosophy, several pieces of equipment which required maintenance were shut down for later maintenance.**

- **Deferred Power (169,000 SWU) - In order to provide for a maximum, safe, operating margin, the contract demand with the Ohio Valley Electric Corporation was lowered from 1954 megawatts to 1700 megawatts on July 16, 1979. This action reduced the production rate by approximately 2,200 SWU per day. The 1700 megawatt contract level remained in effect until September 30, 1979, when the power load was further reduced to a contract level of 785 megawatts as scheduled prior to the strike.**

Q.4. (a) (Cont'd)

- **Deferral of the CIP/CUP Programs (280,000 SWU)** - The total changeout program slipped 12 cells from the prestrike schedule. The breakdown of the 280,000 SWU can be summarized by fiscal year:

FY 1979	51,000 SWU
FY 1980	99,000 SWU
FY 1981	82,000 SWU
FY 1982	46,000 SWU
FY 1983	2,000 SWU

The reduced separative work production from these three categories total 503,000 SWU which equates to less than 4% of the total three-plant complex production during all of FY-1979.

(ii) **Operating Efficiency:** Since several cells were taken offstream and not repaired during the strike, operating efficiency was understandably reduced. The average reduction in separating efficiency was about 1.3 percent.

(iii) **Costs:** Total Portsmouth site costs, less power, incurred for the four months preceding the OCAW strike averaged $11.5 million per month as compared to $8.7 million per month for the remainder of FY 1979 in which the strike was in progress, a monthly difference of $2.8 million. Even during the strike, the production of separative work continued at essentially prestrike levels until DOE directed the power reduction discussed above. It should be noted that the savings of $2.8 million per month cannot be denoted as total, true savings since a substantial amount of work was deferred during the strike such as the CIP/CUP and noncritical preventative maintenance schedules which eventually will be accomplished.

Uranium Enrichment

Q.4. (b) What were the issues in the strike?

A.4. (b) The union submitted a long list of demands at the beginning of negotiations, about 50 pages. However, the serious negotiations revolved around seven issues. These were:

1) The company, Goodyear Atomic Corporation (GAT) wanted mandatory physical examinations for workers in certain positions where physical condition was important for the job requirements. If an employee was disqualified as a result of the physical examination and the disqualification resulted from an occupational disability, GAT agreed to keep the individual at that pay scale. The union wanted any disqualified employee to keep his or her pay grade for life regardless of the cause; including non-occupational injuries, etc.

2) The union wanted the contract to expire on a fixed date that would be common to all union contracts in the nuclear industry. The company wanted a straight three-year extension.

3) The union wanted employees that were at one time in the bargaining unit and promoted to supervisory positions not to be permitted to regain their union seniority if they returned to the bargaining unit.

The company objected. The company promoted a number of bargaining unit employees to supervisory positions specifically for the cascade improvement and uprating programs. When these programs are completed, which will be within the term of the new union contract, many of these supervisors may want to return to the bargaining unit. The company believed they had a commitment to these people to hold their former union seniority.

4) The union wanted workers to be paid time and one-half at the higher rate for all temporary assignments. The company wanted to maintain the existing practice which permitted more management flexibility.

5) The union wanted overtime assignments made strictly on the basis of union seniority. The company wanted more flexibility to select the employees best suited for the particular overtime work with provisions for compensating those not selected.

Uranium Enrichment

A.4. (b) (Cont'd)

6) The union wanted the company to establish a supervisor training program and select new supervisors from only those employees who have been through the training program.

7) The union wanted a full time workmen's compensation representative paid by the company.

The latter two issues were not brought into the collective bargaining negotiations until late in the strike when the Atomic Energy Labor/Management Relations Panel became involved. Although health and safety issues were not part of the demands set forth by the union, the union frequently brought up health and safety issues in the media and in demonstrations, Congressional meetings, and requests for investigations.

Q.4. (c) What was the resolution of this strike?

A.4. (c) The issues were finally resolved when the Atomic Energy Labor/ Management Relations Panel held hearings and issued non-binding recommendations that were acceptable by the company and the union.

The Panel's recommendations were as follows:

1) That the mandatory physical examination requirement in the existing contract be maintained except that if an individual fails to pass for any reason other than a non-occupational injury the individual retains his or her current wage for life.

2) The new contract is to run through May 2, 1982, which is a three-year extension of the old contract.

3) The Panel recommended that supervisors with less than one year union seniority would not retain their seniority if they returned to the bargaining unit. Supervisors with more than one year seniority could retain their seniority if they declared their intention to return to the bargaining unit within 30 days following the start of the new contract and in fact returned to the bargaining unit by May 2, 1981.

4) The Panel recommended that the temporary assignment procedures should not be changed, but that a committee be appointed to resolve differing union/management interrelations relative to certain tasks.

Uranium Enrichment

A.4. (c) (Cont'd)

5) The Panel recommended to keep the overtime procedures in the last contract.

6) The Panel recommended that the company establish a supervisor training program, but that the company not be obligated to select new supervisors from only those persons who completed the training program.

7) The Panel rejected the union's request for a full time workmen's compensation representative.

The Panel recommended a wage settlement within the President's Wage/ Price Guidelines, and further recommended that the strikers be reimbursed for medical insurance payments that the company discontinued during the strike and any medical expenses incurred by those individuals who allowed their insurance to elapse.

Q.4. (d) What has the Department of Energy done to investigate worker allegations of health and safety violations?

A.4. (d) The Department set up a panel of DOE operating and health and safety officials to investigate the allegations. Phase I of the Panel's investigation, which consisted of reviews of the practices and procedures in use at the Portsmouth plant, has been completed. No significant health and safety concerns were identified. Phase II of the investigation which will include onsite interviews with union members, was intended to take place after the strike was settled and operations returned to normal. It is presently scheduled for mid-February.

Q.4. (e) Why did the Department of Energy delay in allowing Department of Labor inspectors into this plant?

A.4. (e) This question is assumed to refer to the National Institute of Occupational Safety and Health (NIOSH) request to visit the Portsmouth plant. The principle cause for the delay was in the excessive number and makeup of the union contingent that NIOSH had asked to accompany them on their visit. Originally, NIOSH proposed to bring nine union representatives, including the President, Vice President, and the collective bargaining team. Since the plant was still on strike, this seemed to the DOE to be an excess number. Also in view of the fact that one of the complaints in a suit the union has filed against the DOE was to ask the court to enjoin the DOE from interference in the collective bargaining process, the presence of the union's collective bargaining team did not seem proper. It was later agreed that the meeting be limited to three union and three company members. The meeting did take place on November 28, 1979.

Q.4. (f) What were the findings of the Department of Labor inspectors' review of this facility?

A.4. (f) The purpose of the NIOSH visit was to review the personnel and industrial hygiene records and the nature of the chemical and physical hazards in the plant. The information was to be used to determine whether or not further epidemiological analysis was warranted, and whether records were suitable to support such a study. During the November 28 meeting, the NIOSH representatives were shown typical personnel and industrial hygiene records and provided a tour of the specific plant facilities suggested by the union representatives. At the concluision of the meeting, the NIOSH representatives stated that the records and tour were satisfactory for their needs. They said they would further consider the need or desirability of proceeding with an epidemiological study, that the final decision would be made at a higher level, and they would let us know what their decision would be. To date, we have not heard from NIOSH.

Uranium Enrichment

Q.4. (g) How long can this facility continue to operate if this strike exists at this plant?

A.4. (g) A basic design feature built in the gaseous diffusion plants was the high degree of equipment automation, reliable instrumentation, and remote control. As such, this feature has allowed the continuous efficient operation of the three gaseous diffusion plants for a combined operating period of about 80 years. The plants were never designed for a total shutdown, although emergency procedures are in place if it was determined necessary. During the recent Portsmouth strike, the plant was operated by salaried personnel with most employees working a 60-hour week. If this mode of operation continued for an extended period, it would undoubtedly put additional stress on all the operating employees. In the biweekly reviews at Portsmouth, however, this stress never surfaced during the 227-day strike to the point plant operations were jeopardized.

Q.4. (h) What recourse does the Department of Energy have against the contracting operators if the strike affects production?

A.4. (h) The Portsmouth plant is a Government-Owned, Contractor-Operated (GOCO) facility, operated by the Goodyear Atomic Corporation (GAT) for DOE under a cost-plus-award-fee (CPAF) contract., As such, DOE dictates the level of production and other operating parameters to be followed. If GAT does not follow this direction or is at fault in not achieving production goals, the first recourse open to DOE is to reduce the fee awarded for the operations. Furthermore, if GAT violates DOE direction, DOE can terminate the contract with GAT if termination would be in the best interest of the Government.

Uranium Enrichment

Q.5. What is the present status of the uranium enrichment program's efforts to market its services?

A.5. DOE is actively working both domestically and abroad to explain the advantage of obtaining DOE uranium enrichment services, cultivate a responsive customer services orientation, and explore potential new sales opportunities. These efforts include marketing missions similar to one just completed in January to the Far East countries of Korea, Japan, and Taiwan. Enhanced communication and understanding between DOE and its customers is being pursued via various reports, newsletters, and seminars which help explain DOE enrichment program actions and policies. A series of regional uranium enrichment seminars are being conducted in February throughout the United States. DOE will continue to implement marketing efforts in the future which would provide mutually beneficial results to DOE and its customers.

Q.5. (a) How many foreign contracts have been cancelled?

A.5. (a) Two enrichment services contracts were cancelled by foreign customers in calendar year 1978 and an additional eight foreign contracts were cancelled in calendar year 1979.

Q.5. (b) What is the reason for these cancellations?

A.5. (b) Three enrichment contracts were cancelled because the reactor projects were cancelled, two (Iran) were cancelled due to a change in government policy, one (Sweden) due to uncertainty in their nuclear program, and four enrichment contracts were terminated with DOE in favor of URENCO and EURODIF as the suppliers. Reasons given by the customer for the switch to European suppliers included diversity of supply, support of national programs, and uncertainty in security of supply arising from the U. S. nonproliferation policy.

Q.5. (c) How many new contracts were entered into during calendar year 1979?

A.5. (c) During calendar year 1979 the following contract additions occured:

1) A new conditional contract with Egypt was signed which replaced a conditional contract that had expired. The contract will become final when the U. S. completes action approving an agreement for cooperation with Egypt.

2) A contract with Japan was amended to add 300MW of electric generation to the contract coverage.

3) A new contract with EURATOM Supply agency was executed to replace an existing contract.

Uranium Enrichment

Q.6. What was the unexpended balance for Uranium Enrichment Program activities for Fiscal Year 1979, and what is the reason for this?

A.6. At the end of FY 1979, there was a total of $724.4 million in unexpended balances available for the Uranium Enrichment program activities. Of this amount, $79.9 million was for outstanding obligations in the operating appropriation. This consisted of $23.2 million in outstanding commitments and $56.7 million in contract prefinancing. The remaining $644.3 million was in the Plant and Capital Equipment Appropriation and consisted of the following:

(1) $226.5 of commitments which were unpaid due to the Portsmouth strike;

(2) $284.1 million in outstanding Gas Centrifuge commitments; and

(3) $133.7 million in outstanding commitments for various projects.

Uranium Enrichment

Q.7. What is the Department of Energy's projection for additional enrichment capcity beyond the Portsmouth Gas Centrifuge Plant?

A.7. Civilian nuclear power growth after 1990 is very uncertain; however, based on current estimates, additional DOE enrichment capacity could be needed in the early to mid-1990's. Since centrifuge enrichment capcity can be built in about six years, there is sufficient time to plan for future capacity as demand becomes firmer.

Q.7. (a) What are the Department's plans for the retirement or replacement of any of the existing diffusion plants?

A.7. (a) The existing uranium enrichment plants use the gaseous diffusion process which has proven to be very reliable, but requires large amounts of electrical power. A new process, the gas centrifuge process, has been developed which uses only about four or five percent of the power required by the diffusion process. Currently, the cost of production from the gas centrifuge process is estimated to be greater than the cost of production from the existing gaseous diffusion plants, considering the Gaseous Diffusion Plant capital investment as sunk cost.

The gaseous diffusion complex continues to perform with greater than 99 percent on-stream reliability and despite a prolonged strike at Portsmouth, production during the last year was within 96 percent of our target. Whereas the diffusion complex will continue to be the major portion of our enrichment capability, rising costs of electricity for the plants may necessitate replacement of some of this capacity with more energy-efficient processes such as gas centrifuge or, in the longer term, advanced isotope separation methods. We are monitoring this situation closely, and will recommend appropriate action to the Congress when and if replacement is warranted.

Uranium Resource Assessment

Q.1. What was accomplished by this program during Fiscal Year 1979?

A.1. During FY 1979, the first 18 of the planned 116 quadrangles to be assessed by FY 1980 were completed. Data acquisition for FY 1979 included collection of 130,322 reconnaissance and 38,441 detailed hydrogeochemical and stream sediment samples; 189,242 flight line miles of airborne radiometric and magnetic survey data; 212,174 feet of drilling; and 305,142 feet of logging of holes previously drilled by industry for purposes other than for uranium exploration (water, oil, gas, etc.). Hydrogeochemical surveys were completed for use by assessors for 68 quadrangles and aerial surveys were completed for 144 quadrangles in FY 1979.

In FY 1979, resource investigations were initiated on three Intermediate Grade resource and two World Class resource sites that hold promise for increasing the uranium resource base of the United States.

An interim NURE Report summarizing the uranium resources based on all NURE-produced data available at the time, was published in 1979. A total of 184 technical reports were generated by NURE in 1979 and open-filed. These included 72 hydrogeochemical surveys, 61 composite aerial surveys, 6 drilling reports and 45 topical reports.

International activities included participation in the International Resource Evaluation Project (IUREP) which resulted in the publication in FY 1979 of a report on World Uranium Potential covering 185 countries. Following up on this report, an Orientation Phase was initiated in FY 1979 to identify favorable areas through field investigations in countries having high potential but previously inadequate exploration and to develop detailed evaluation plans to expand the identified world uranium resource base. The first country study was intiated in Portugal in FY 1979.

Uranium Resource Assessment

Q-2. What changes in the direction of the Uranium Resource Assessment Program are included in the Fiscal Year 1981 Budget request for this program?

A-2. The Uranium Resource Assessment Program acquires airborne radiometric and magnetic data, hydrogeochemical and stream sediment data, and field and subsurface data which are studied, integrated, and evaluated to identify areas favorable for the occurrence for uranium deposits. The geologic characteristics of these areas are then compared to those in areas of known uranium deposits and a quantitative assessment of potential uranium resources is made. In the past, major effort was directed toward the data gathering phase of the program and a substantial data base has been generated. Beginning in FY 1980 and in the future, efforts will increasingly be directed toward utilization of this data base for the evaluation and assessment phases.

The FY 1981 budget is reduced by 43 percent from FY 1980 levels to $35,755,000 including pay cost supplemental. This will stretch completion of the program. Planned programmatic activities were also reduced to the level indicated in the response to question 2.(a) below.

In addition to slowing the pace of the assessment program, the reduced funding level requires modification of the program strategy. For example, the systematic and comprehensive character of the national hydrogeochemical surveys have been replaced with sampling of selected sites within quadrangles. As a result, two of the DOE labs will be phased out of the program. Furthermore, drilling in support of quadrangle assessment will be sharply reduced, with major emphasis being on support of World Class and Intermediate Grade resources investigations.

Uranium Resource Assessment

Q.2. (a) What activities will be undertaken during Fiscal Year 1981?

A.2. (a)

- Aerial reconnaissance surveys for 129 quadrangles will be completed.
- Hydrogeochemical studies will be completed in the most favorable areas of 30 quadrangles.
- Chemical analyses will be made, on a priority basis, for about 35,000 backlog hydrogeochemical and stream sediment samples.
- Quadrangle evaluations and assessments will be completed for 30 priority quadrangles.
- One Intermediate Grade Resource and two World Class site investigations will be initiated.
- Technology application efforts to apply advanced technologies for detection and assessment or uranium resources will be continued.
- Participation in cooperative international projects to expand the identified world uranium base will be continued.
- Long- and short-term analysis of uranium supply and production capability will be continued.
- Monitoring of uranium market activities, including dependence on foreign uranium, will be continued.
- Development of improved uranium resource assessment methodologies will be continued.

Q.2. (b) When is completion of this program anticipated?

A.2. (b) The National Uranium Resource Evaluation is currently scheduled for completion by the late 1980's. All other activities, such as the monitoring of industry exploration, the calculation of reserve estimates, and technology applications, will continue at a level of effort.

Uranium Resource Assessment

Q.2. (c) What results have been achieved by this program to date?

A.2. (c) Through FY 1979, 18 of the planned 116 quadrangles to be assessed by FY 1980 were completed. Data acquisition through FY 1979 included collection of about 500,000 reconnaissance and detailed hydrogeochemical and stream sediment samples; 780,000 of the planned 1,100,000 reconnaissance flight line miles needed for completion of the National Aerial Radiometric and Magnetic survey; approximately 330,000 feet of drilling; and over 300,000 feet of logging of holes previously drilled by industry for purposes other than for uranium exploration. Hydrogeochemical surveys were completed for use by assessors for 102 quadrangles and aerial surveys were completed for 240 quadrangles.

In FY 1979, resource investigations were initiated on three Intermediate Grade Resource and two World Class Resource sites that hold promise of increasing the known uranium resource base of the United States. The uranium resources of these five sites will be summarized in a "Uranium Resources of the United States" report to be completed on October 1, 1980.

Uranium resource assessment methodologies portraying probability distributions rather than point estimates have been developed and are now being used in the National Uranium Resource Evaluation program.

Through FY 1979, the program has established and upgraded field calibration facilities to maintain quality control for DOE contractor and industry logging equipment and aerial survey systems. In addition, an advanced direct uranium borehole logging technology has been developed for the NURE program and transferred to industry. Technology integration efforts have been directed toward evaluation of techniques and combinations of multiple techniques for uranium exploration. Accomplishments of International Activities are as stated in A.1.

A preliminary NURE report summarizing the uranium resources of the United States based on all existing resource data was published in 1976; and an Interim NURE report summarizing the uranium resources based on all NURE-produced data available at the time, was published in 1979. Since January 1975, over 1,000 technical reports have been open-filed as a result of the NURE program.

Q.2. (d) What was the Department's funding request to the Office of Management and Budget for this program for Fiscal Year 1981, and what was the requested personnel level?

A.2. (d) The FY 1981 DOE budget submitted to OMB requested $64,500,000 in Budget Authority and 102 full-time permanent personnel. OMB authorized 90 positions. Present authorized strength is 113.

[Whereupon, at 11:50 a.m., the subcommittee adjourned, to reconvene at the call of the Chair.]

FISCAL YEAR 1981 AUTHORIZATION FOR THE DEPARTMENT OF ENERGY AND THE FEDERAL ENERGY REGULATORY COMMISSION

MONDAY, FEBRUARY 11, 1980

House of Representatives,
Subcommittee on Energy and Power,
Committee on Interstate and Foreign Commerce,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10 a.m., in room 2123, Rayburn House Office Building, Hon. John D. Dingell, chairman, presiding.

Mr. Dingell. The subcommittee will come to order.

Mr. Stelson, we are pleased to welcome you and your associates to these hearings on conservation and on the solar application portions of the Department of Energy budget for fiscal year 1981. This is the first time you have been before the subcommittee, and it is a pleasure to welcome you here.

It is also important that you know that the subcommittee is in full support of your having success with the program and that we are desirous of doing all things necessary, both in terms of our actions here in the legislative arena and also in the authorization arena, to assure that you have the confidence and the capability as well as the orientation which is necessary for you to have the success that we think the Nation requires that you shall have because of the circumstances in which we find ourselves.

I must start out raising some concerns. First, the conservation programs within the Department of Energy get a great deal of enthusiastic support, which does not seem to translate itself into the kind of support for programs that the Nation needs.

The Chair notes that the budget for conservation is up over last year's request by only $252 million, or about 20 percent. I note that is very little ahead of the increase that would normally stem from the 13 percent inflationary increase in this country in the past year.

Second, I see throughout the budget document all sorts of references to the number of barrels of oil equivalent per day or per year that this or that or another program is anticipating saving by 1985 or the year 2000. I note, however, that these goals are good, but I also note that these goals are a long way in the future, and we don't seem to find much in terms of immediacy, and that is what we can do quickly to bring aboard the new technologies through new mechanisms so as to assure maximum conservation at the earliest time.

Admittedly, the Nation has come a long way since the oil embargo of 1973 and 1974, but it is clear to say that the Nation had to come a long way since that, and must go a great deal further.

The Chair always has some sinking feelings with regard to the progress of this Nation as to whether or not we are going to go far enough or fast enough or move quickly enough to save us from the impending calamities of shutoff of oil from the Middle East or perhaps from a set of circumstances which might relate to some other disorder in the market which could have disastrous consequences to the Nation.

I am also very much concerned, as you know, about the failure to have proper conservation by both the citizens and the economy for purposes of reducing the outflow of dollars which is now becoming a hemorrhage. Last year, the figure we were told was something on the order of $70 billion, approximately the value of the State of Iowa. This year, we anticipate it will go to about $92 billion, and there is a question how long this country can continue selling its national assets and national treasures for oil when the conservation mechanism is not being exploited as fully as it could or must for the benefit of all.

I would note that the numbers don't always amount to what they should, particularly when they are translated into meaningful ones. For example, photovoltaics are supposed to contribute one quad by the year 2000 as a result of acting on the President's stated goal of obtaining 18½ quads for renewable energy resources by that date. The hyperbolic boost of this is that we will save the equivalent of 78.5 million barrels of oil per year, which appears to be a good figure unless one calculates that it amounts to only 215,000 barrels a day against a total use of somewhere around 17½ or 18 million barrels.

Despite a presidential commitment to obtain 10 percent of our unleaded gasoline supply by using alcohol to produce gasohol, I note with disappointment that the budget with which the Assistant Secretary is most directly involved, makes virtually no mention of gasohol.

I also am troubled that emphasis that should be made with regard to distinguishing which mechanism for producing gasohol, whether from methanol or ethanol, has not been fully explored, nor have the costs nor the benefits, nor the penalties in terms of energy use, energy loss associated with this kind of transition been fully calculated and explored and measures set forth to meet them.

Now, I also do not see developing within the Department real commitment for the active promotion of solar energy and energy conservation. The research and development budget is four times that of the conservation budget, and the solar conservation gets 25 percent for the amount committed to research in solar.

The Chair is not at all averse to supporting research in this Nation. On the contrary, I have been an active supporter of research and believe it is a necessary step in moving the country forward.

But in terms of DOE's budget, I am fearful there is too much emphasis on research and far too little emphasis on getting the results of our research into the marketplace.

Whether this is the responsibility that should be carried forward through your office or whether it is something that should be carried through tax incentives or through other parts of the Department of Energy, I am not prepared to say at this time, but I am prepared to say that it is something which must be concentrated on with great diligence, and I detect that is not being done.

Having expressed these concerns, I reiterate my welcome to you. The commitment Mr. Duncan has made indicates that he feels toward conservation and energy that they are extremely important, and that is most gratifying. I hope his commitment will make meaningful progress possible.

With those remarks, I welcome you to the committee in the hope that we can work very diligently to make the programs of conservation which you head a success, both to yourself and for the country.

STATEMENT OF THOMAS STELSON, ASSISTANT SECRETARY FOR CONSERVATION AND SOLAR ENERGY, DEPARTMENT OF ENERGY, ACCOMPANIED BY MAXINE SAVITZ, DEPUTY ASSISTANT SECRETARY; JOHN MILLHONE, DIRECTOR, BUILDINGS AND COMMUNITY SYSTEMS; ROBERT SANMARTIN, DEPUTY ASSISTANT SECRETARY FOR FIELD OPERATIONS AND INTERNATIONAL PROGRAMS; JOE LaGRONE, DIRECTOR, SPECIAL PROJECTS OFFICE FOR WEATHERIZATION; FRANK STEWART, DIRECTOR, STATE GRANT PROGRAMS; DOUGLAS HARVEY, DIRECTOR, INDUSTRIAL PROGRAMS; AND JOSEPH BARROW, DIRECTOR OF COMMERCIALIZATION

Mr. STELSON. Thank you very much.

I have a longer overview statement which I would like to submit for the record and just concentrate on some highlights, if that is agreeable.

Mr. DINGELL. Without objection, your full statement will be inserted in the record [see p. 150], and we will recognize you for such additional comment as you wish to make.

Mr. STELSON. I have with me, sitting here on my left, Dr. Maxine Savitz, the Deputy Assistant Secretary for Conservation.

Mr. DINGELL. Doctor, we are pleased to welcome you and thank you for being with us.

Mr. STELSON. I am pleased to be here today and to submit the fiscal year 1981 budget request of the Office of Conservation and Solar Energy to the Subcommittee on Energy and Power.

The need for energy conservation and the increased use of renewable resources is particularly critical at this time in the Nation's history. Escalating costs of energy and increasing dependence on foreign petroleum threaten our economic prosperity, aggravate inflation, weaken our currency and constrain our foreign policy.

To accomplish its mission, the Office on Conservation and Solar Energy encompasses three groups of programs and activities. First, the office formulates and administers the Department's energy conservation programs, which are designed to improve the energy efficiency, storage, and systems utilization capabilities of the Nation's major energy end-use sectors, including transportation, buildings and community systems, and industrial applications.

Second, as a result of an agency-wide realinement of functions in October 1979, the Department's solar programs have been consolidated under this office. All the necessary programs from technology research, development, and demonstration, to market analysis and application, are now reporting to the same Assistant Secretary, including the Solar Energy Research Institute and the four Regional Solar Energy Centers. We are taking strong management steps to improve the operation and interrelationship of these important field institutions.

Finally, Conservation and Solar Energy is forging a partnership with State and local governments through the administration of grant, technical assistance, and outreach programs, to accelerate the widespread application of both conservation and renewable resources.

For fiscal year 1981, the Department is requesting 880 full-time permanent staff for Conservation and Solar Energy programs. An additional 31 positions are being requested for management and support activities.

The chart on page 4 of my written testimony provides a detailed overview of the Conservation and Energy 1981 budget request. For conservation-related programs we are asking for $1,067,300,000. For solar energy we are requesting $724 million. This brings the total request to $1,793,700,000, including $2.4 million for the inventors program that is requested under DOE's administration appropriation request.

The department's conservation programs are designed to promote both readily available conservation technologies, or those that will save energy in the short term and to provide for the necessary research, development and demonstration for technologies that can meet our energy needs in the future.

Specifically, for fiscal year 1981 we are requesting $97.6 million for buildings and community systems programs, $51.8 million in budget authority for industrial programs, and $113 million for transportation programs.

The importance and timeliness of our national energy conservation efforts, and the unique potential for motivating a large number of individuals to undertake conservation measures, has prompted the department to propose the energy information campaign. Evaluations of related programs such as the low cost/no cost program tested in New England have indicated that paid advertising can successfully increase individual conservation actions. The department is proposing to expand its paid advertising efforts and is requesting $50 million for this purpose in fiscal year 1981.

Also, the Office of Conservation and Solar Energy is supporting national goals by promoting widespread energy conservation and renewable resources in the public and the private sectors through activities undertaken at all levels of government. We recognize that, as part of this overall strategy, programs must be developed in response to regional, State and local needs and special conditions.

For fiscal year 1981, we are requesting $739.2 million in budget authority for these energy assistance programs.

Specifically, the fiscal year 1981 budget continues support, at the full authorized level, of the weatherization assistance program for low-income households, particularly the low-income elderly and handicapped.

In December 1979, the last month for which complete data is available, 17,000 homes were weatherized by the program. This brought the total number of homes retrofitted under DOE's weatherization assistance program to 240,000.

An interagency action plan was developed by DOE, the Labor Department and the Community Services Administration to accelerate the actual weatherization of homes. Most recently, the weatherization assistance program has been placed temporarily under the direction of the Secretary's Special Projects Office to ensure priority attention to its objectives within the department.

By permitting wider use of program funds for labor when sufficient CETA labor is not available, and by improving program management at the Federal, State and local levels, we expect to significantly increase the number of homes weatherized each month. We would expect that by the end of March 1980, States will have established specific production goals for the remainder of the fiscal year.

Recognizing the need to help States and local governments consolidate their grant activities, and expand and coordinate other energy-related activities, including energy emergency planning, President Carter submitted the Energy Management Partnership Act to Congress on May 15, 1979. Basically, this legislation provides for the development of State energy plans, energy emergency planning, solar and energy conservation activities, funding for programs/requirements not funded elsewhere, and coordination of Federal energy assistance.

The department and this office strongly support passage of the EMPA legislation because it will streamline the application process for State grant programs and will enable States and local governments to strengthen their energy planning and management activities.

Accrued benefits from this activity will include more cost-effective administration of Federal programs, enhances coordination between similar elements of various Federal programs, and improved management at the national level. We are requesting that EMPA be funded at approximately $152 million in fiscal year 1981.

Overall, the budget submitted for fiscal year 1981 is a balanced approach toward increasing the Nation's domestic energy supplies through greater energy efficiency and the use of renewable energy resources. These two elements—conservation and the many forms of solar energy—are an integral part of a long-range energy strategy developed by the President for meeting the energy needs of the Nation through the end of the century.

Furthermore, these programs have distinct advantages for preserving and enhancing our way of living by increasing employment, protecting the environment, and improving our international security. Therefore, we ask that this package be given every consideration for funding at the full levels requested.

Thank you, Mr. Chairman.

[Testimony resumes on p. 207.]

[Mr. Stelson's prepared statement follows:]

OVERVIEW TESTIMONY FOR THE
OFFICE OF CONSERVATION AND SOLAR ENERGY
U.S. DEPARTMENT OF ENERGY

Mr. Chairman, it is a pleasure to appear before the House Subcommittee on Energy and Power, of the Committee on Interstate and Foreign Commerce for the first time since assuming my position as Assistant Secretary for Conservation and Solar Energy (CS) in the Department of Energy (DOE).

My testimony today will provide the Committee with an overview of the FY 1981 budget request for CS and will also focus on specific programs which are of greatest interest to the Subcommittee. These include in the conservation area, programs such as the Building Energy Performance Standards (BEPS); the Appliance Standards; the Federal Energy Management Program (FEMP); the Industrial reporting program and Recovered Materials targets; and the non-R&D transportation activities. State and Local Energy Assistance programs will also be discussed including the Weatherization program; Schools and Hospitals program; the Emergency Energy Conservation programs, Energy Impact Assistance and the Energy Management Partnership Act.

The need for energy conservation and the increased use of renewable resources is particularly critical at this time in the Nation's history. Escalating costs of energy and increasing dependence on foreign petroleum threaten our economic prosperity, aggravate inflation, weaken our currency, and constrain our foreign policy.

Energy conservation is the elimination of waste and the investment in more efficient buildings, machines and consumption patterns. Renewable resources, principally the many forms of solar energy, obviate the need for additional foreign petroleum and extend existing domestic supplies. In this respect, conservation and renewable resources complement one another and are vitally important to enhancing our overall national security.

The mission of the Office of Conservation and Solar Energy is to promote energy conservation and the increased use of renewable resources, and thus further several important national goals. These include:

- Less reliance on imported fuels in order to reduce our vulnerability to shortfalls or disruptions created by fluctuating world economic and political events.
- A more even balance of trade, through reduced imports, to achieve a more stable domestic and international economy. Our imports last year exceeded $80 billion which is the major contributing factor to our balance of payment deficits.
- And finally, accelerate our transition from a reliance on oil and natural gas to the greater use of coal and renewable resources of domestic energy supplies.

Organization

To accomplish its mission, the Office of Conservation and Solar Energy encompasses three groups of programs and activities. First, the Office formulates and administers the Department's energy conservation programs, which are designed to improve the energy efficiency, storage and systems utilization capabilities of the Nation's major energy end-use sectors, including transportation, buildings and community systems, and industry. Second, as a result of an agency-wide realignment of functions in October 1979, the Department's solar programs have been consolidated under this Office. All the necessary programs from technology research, development and demonstration, to market analysis and application are now reporting to the same Assistant Secretary, including the Solar Energy Research Institute (SERI) and the four Regional Solar Energy Centers (RSECS). We are taking strong management steps to improve the operation and interrelationship of these important field institutions. Finally, CS is forging a partnership with State and local governments through the administration of grant, technical assistance and outreach programs, to accelerate the widespread application of both conservation and renewable resources. Four Deputy Assistant Secretaries have been designated to provide the Assistant Secretary with the management and administrative support required to ensure that the full spectrum of CS activities is managed properly. Each Deputy has been given responsibility for specific programs and functions including a Deputy Assistant Secretary to handle energy conservation, a Deputy Assistant Secretary for solar, a Deputy Assistant Secretary for our State and local grant programs (including Small Scale Technology, Inventions program and Emergency programs) and a Deputy Assistant Secretary for field operations and international programs.

For FY 81 the Department is requesting 880 full time permanent staff for Conservation and Solar energy programs. An additional 31 positions are being requested for management and support activities for a total of 911 full time positions.

The attached chart provides a summary of the conservation and solar energy budget as it relates to the three major program groups—Conservation, Solar Energy and State and Local Assistance.

Conservation

Recognizing its critical importance, the President and Secretary Duncan have made conservation a top policy and management priority. Indeed, the President, in his State of the Union address, designated 1980 as "the year of energy conservation." The Department's conservation programs are designed to promote both readily available conservation technologies, or those that will save energy in the short term; and, to provide for the necessary research,

CONSERVATION AND SOLAR ENERGY
Budget by Major Program Groups

(in million of dollars)

PROGRAM GROUP	FY 81 REQUEST
Conservation	
Buildings and Community	97.6
Industry	58.9
Transportation	113
Energy Conversion Technology	11
Energy Information Campaign	50
State and Local Assistance	
State and Local Programs	568.6
Appropriate Technology	14.8
Inventors Program 1/	3.4 (5.8)
Energy Impact Assistance	150
SUBTOTAL CONSERVATION	1067.3 (1069.7)
Solar	
Solar Applications	186.3
Solar Technology	465.9
Energy Storage	71.8
SUBTOTAL SOLAR	724.0
TOTAL CS REQUEST	1791.3 (1793.7)

1/ An additional $2.4 million is requested under DOE Administration Appropriation Request for the Inventors Program.

development and demonstration for technologies that can meet our energy needs in the future. CS programs address these targets of opportunity in several ways: through regulatory programs, such as the Building Energy Performance Standards (BEPS) for new buildings, the Appliance Efficiency Standards and the Industrial reporting program; RD&D for new technologies and non-R&D programs to increase energy efficiency in the end-use sectors; public education and information programs such as the appliance labeling program, Low Cost/No Cost campaign, Driver Conservation Awareness program, and the fuel oil dealer training program; programs oriented to the homeowner, such as the Residential Conservation Service; and financial assistance programs such as the Schools and Hospitals program and the Weatherization Assistance program.

Buildings

The President's FY '81 budget request for the Office of Buildings and Community Systems (BCS) is $97.6 million.

The greatest amount of near-term conservation potential in the buildings area lies in retrofitting existing structures with conservation features. Single family homes and commercial buildings account for approximately 38 percent of all primary energy consumed. Most of this energy is used to operate large appliances such as water heaters, oil burners and air conditioners. Additional conservation potential exists in areas such as window materials, insulation, etc.

The Federal strategy in the buildings and community area reflects the diffused and varied nature of energy consumption in this sector. The activity is shaped along program thrusts, each representing a major energy end-use area and assigned to one of the BCS divisions. The thrusts are:

- Consumer Products, which include appliances, furnaces, air conditioners, hot water heaters, lighting equipment, heat pumps and similar building elements.

- Building Systems, which include the building envelope and the equipment in the building as it functions as an integrated energy system.

- Community Systems, which include the facilities that provide energy to a community, such as district heating and urban waste-to-energy projects, and energy-efficient community planning. BCS also has responsibility for the Federal Government's own energy conservation activities and this activity is placed in a fourth BCS division along with responsibility for systems analysis and emergency planning activities.

I would now like to discuss several of the major programs in the buildings and community systems area that I know are of particular interest to the Subcommittee—the Buildings Energy Performance Standards Program, the Appliance Standards Program, the Federal Energy Management Program and the Residential Conservation Service.

The Buildings Energy Performance Standards Program (BEPS) authorized under P.L. 94-385, is a regulatory program directed toward promoting energy efficiency in new buildings, through building standards. These standards are performance rather than prescriptive because they set an energy budget for each building type rather than prescribe how much insulation, double glazing etc. is required.

This approach allows the buildings industry greater flexibility and encourages the use of solar energy.

A Notice of Proposed Rulemaking for BEPS was published in November 1979 and the comment period will end April 30, 1980. We plan to publish the final rulemaking for the standards in August 1980.

The BEPS program in FY '81 will be directed toward extending the standards to restaurants and industrial buildings, revising the existing standards and improving the existing analytical techniques to incorporate active and passive solar systems and provide training for building code officials.

The Appliance Standards program (authorized under P.L. 94-163 and amended by P.L. 95-619) budget request fo $7.9 million represents an increase over FY 1980 appropriations. The objective of this program is to improve the energy efficiency of 13 major household appliances such as water heaters, oil burners, and air conditioners through the development of minimum efficiency standards. The standards program include appliance test procedures, labeling requirements and an education effort to inform the public of the availability of higher efficiency appliances in the market place. In FY 1980 we will issue a Notice of Proposed Rulemaking on minimum efficiency Standards for the first 9 appliance categories. In FY 1981 we will issue final rules on these nine product categories and will publish proposed rules for the other four categories.

The Federal Energy Management Program (FEMP) budget request of $2.7 million represents an increase of $2.3 million over FY 1980 appropriations. This program supports the Federal Government's own energy management program and the budget increase would enable DOE to exert leadership in this area by initiating energy conservation demonstrations and more closely monitoring the performance of Federal departments and agencies. Major program accomplishments in

FY 79 and FY 80 include activities such as developing and implementing a life-cycle costing methodology for evaluation of conservation and solar investments within the Federal Government; developing a Federal 10-Year Building Energy Conservation Plan; submitting audit reports to Congress for buildings over 30,000 square feet; and, the Federal Buildings Guidelines and Federal Operations Guidelines. We have also requested in the FY 80 Supplemental $2.3 million for the FEMP program.

The FEMP program is coordinated with the Federal Solar Buildings Program and we are looking at ways to further improve coordination with other Federal programs and minimize duplication.

The Residential Conservation Service program requires that large gas and electric utilities provide information on conservation and solar energy to their residential customers, offer home energy audits, and make arrangements for installing and financing retrofit measures. Approximately 3,000,000 home energy audits will be conducted in FY 1981. DOE will provide technical assistance to States, utilities and home heating suppliers in the planning and implementation of the program. DOE also supports the Department of Treasury in developing standards for energy conservation measures eligible for the residential energy tax credit.

Industry

In industry, some progress towards greater energy efficiency has already occurred. Since 1972, America's 10 most energy-intensive industries are now saving the equivalent of 1.24 million barrels of oil per day compared to the last full year before the oil embargo. These savings are largely a result of operational changes, and even more savings can be expected as new industrial processes are developed.

Specifically, the CS programs in cost-shared technology RD&D and marketing and deployment stimulate the rate of energy-related change and bring these technologies to the marketplace faster than would occur without government assistance. For FY 81 we are requesting $58.9 million for industrial programs, out of this request, $4.5 million will go towards implementation and deployment activities. These activities include the industrial reporting program, analytical support to program-wide project selection, as well as a range of information-dissemination activities.

As part of the requirements of the National Energy Conservation Policy Act (NECPA) of 1978 (P.L. 95619), the Department is responsible for developing and administering regulatory programs in the industrial sector. The NECPA legislation expanded the existing industrial reporting requirements to include mandatory provisions requiring all companies which consume at least 1 trillion Btu's per year in each of the 10 most energy consuming manufacturing industries to report their energy consumption figures to DOE (either directly or through trade associations) each year and to show what actions are being taken to conserve energy. In FY 81 we are planning to continue management of this program and will submit to Congress a report on 1980 industrial energy efficiency.

The Department (CS) is also required under NECPA to establish voluntary targets for the use of recovered materials in four industries - metals and metal products, paper and allied products, textile mill products and rubber. Proposed voluntary recovered materials targets were published in June 1979. Final targets should be issued within a few weeks. These targets were developed in accordance with the requirements of the NECPA and represent the maximum technologically and economically feasible increase in the use of recovered materials that the industries can achieve by 1987.

Finally, NECPA also requires DOE to prepare a detailed classification system for industrial motors and pumps. In FY 80 the report on motors and pumps will be completed as an evaluation of the other items just mentioned will be initiated.

Transportation

The transportation sector, which represents 26 percent of the Nation's total energy consumption is another area with significant energy saving potential. Already some progress has been made in increasing the miles-per-gallon economy of new vehicles. Total gasoline consumption, however, continues to rise yearly.

CS transportation programs address both short-term opportunities for conservation principally through consumer education and information and mid- and long-term opportunities through advanced automotive propulsion RD&D and the development of alternative automotive technologies, particularly, electric and hybrid vehicles. We are requesting $113 million for transportation-related programs in 1981.

Specific non R&D activities include a Fuel Economy Information Program for new car and light truck purchasers. Approximately 17 million copies of the Gas Mileage Guide are printed and distributed annually to 29,000 automobile dealers. This effort will be continued in 1981. Also included is a Driver Conservation Awareness program which provides automobile fleets and the general motoring public with information on conserving fuel. Additionally CS conducts programs to improve the fuel-use efficiency of commercial vehicles and evaluate new transportation technology concepts from individuals, small businesses, and academic institutions and test those that show significant potential to save energy.

A new item in the conservation area is the energy information campaign.

The DOE has principally relied on public service announcements, brochures, and general and technical publications to communicate the conservation message to the general public. While these efforts have been effective in providing information to specific targeted audiences, they still cannot reach a wide general audience. The importance and timeliness of our national energy conservation efforts, and the unique potential for motivating a large number of individuals to undertake conservation measures, has prompted the Department to propose the Energy Information campaign. Evaluations of related programs such as the Low Cost/No Cost program tested in New England have indicated that paid advertising can successfully increase individual conservation actions. The Department is proposing to expand its paid advertising efforts and is requesting $50 million for this purpose in FY 1981.

State and Local

The State and local grants programs are designed to support national energy goals by promoting widespread energy conservation and renewable resources in the public and the private sectors through activities undertaken at all levels of government. We recognize that as part of this overall strategy, programs must be developed in response to regional and State and local needs and conditions. Furthermore, the Federal Government, in partnership with State and local entities, should provide the mechanism for disseminating information regarding existing and new technologies developed in DOE and the private industry having significant energy conserving and renewable resource potential. Also, DOE can serve to promote the feedback of ideas regarding research and development needs, innovation, and accomplishments between local governments, the States and the Federal Government. Further, it can directly encourage individual energy initiatives and innovation by funding small-scale technology projects and inventions. Finally, a major part of DOE's effort in this area is to provide financial and technical assistance to plan and implement energy programs at the State, local and community level. In FY 81 we are requesting $739.2 million for programs in this area (includes State and Local Grant Programs, Appropriate Technology and Inventors Programs, The Emergency Conservation Programs, Energy Impact Assistance and the Energy Management Partnership Act).

Specifically, the FY 1981 budget continues support, at the full authorized level, of the Weatherization Assistance Program for low-income households, particularly the low-income elderly and handicapped.

In December, 1979, the last month for which complete data is available, 17,000 homes were weatherized by the program. This brought the total number of homes retrofitted under DOE's Weatherization Assistance Program to 240,000.

During FY 1979, the Department identified a variety of difficulties with this program at the Federal, State and Local level that were slowing the expenditure of funds. As a result, an Interagency Action Plan was developed by DOE, the Labor Department and the Community Services Administration to accelerate the actual weatherization of homes. Most recently the Weatherization Assistance Program has been placed temporarily under direction of the Secretary's Special Projects Office to ensure priority attention to its objectives within the Department.

By permitting wider use of program funds for labor when sufficient CETA labor is not available, and by improving program management at the Federal, State, and local levels, we expect to significantly increase the number of homes weatherized each month. We would expect that by the end of March, 1980, States will have established specific production goals for the remainder of the fiscal year.

The Schools and Hospitals Grants program budget request for FY 1981 includes $202.5 million for the third year of matching grants to support detailed energy surveys and conservation and solar investments in existing, non-profit school and hospital buildings. This program provides the only DOE financial assistance on a cost shared basis to support conservation investments in buildings owned by public or non-profit institutions. During the first, full year, of this program short lead times for issuing appropriate regulations and grants for preliminary and detailed energy audits slowed the expenditure of program funds. These problems have been resolved and can be seen by the progress to date: 45 State plans have been approved for the second phase of the program—technical assistance and energy conservation measure grants. The first grants under this second phase will be made within the month, with a second grant cycle to be completed by the end of FY 1980. We anticipate that as many as 60,000 grants will be awarded in various amounts to various institutions over the life of the program. Further, we anticipate that many of the conservation projects will commence this spring and summer. Appropriation of this request will bring the total available grant funds to $461 million of the $900 million originally authorized. Also, the administration will be requesting legislation to extend the authorization to enable the full $900 million to be appropriated.

President Carter submitted the Energy Management Partnership Act (EMPA) to Congress on May 15, 1979, to help States and local governments consolidate their grant activities, and expand and coordinate other energy-related activities, including energy emergency planning. The Department and this office strongly support passage of the EMPA legislation because it will streamline the application process for State grant programs and will enable States and local governments to strengthen their energy planning and management activities. Accrued benefits from this activity will include more cost-effective administration of Federal programs, and improved management at the national level. We are requesting that EMPA be funded at approximately $152 million in FY 1981. Approximately one-third of those dollars will go to local governments for local energy activities. States will receive initial planning grants for the development of State energy plans which will provide the framework in which a State, working with local governments would develop and implement its own strategies and programs. State activities would include planning for set-aside petroleum allocations, monitoring of supply and consumption, and developing and implementing other emergency energy measures which are responsive to State needs. This would allow continuation of many State conservation activities begun under EPCA/ECPA State Energy Conservation Programs and the Energy Extension Service and would support the development and implementation of renewable resource programs.

The Emergency Energy Conservation Program is responsible for program administration, development and maintenance of the data bases essential for rapid and equitable implementation of these authorities and for providing technical assistance and the monitoring of state performance. In the event of a severe national fuel shortage measures could be used in a state which did not meet the mandatory fuel conservation targets set for that state by the President. For example, state targets may be developed for various fuel types; gasoline, heating oil and electricity. Voluntary gasoline targets have been developed and an Interim Final Federal Standby Plan was issued February 4, 1980.

The $150 million request for the Energy Impact Assistance Program represents a $100 million increase over FY 80 appropriations. The program provides assistance to areas experiencing significantly higher employment as a result of significant energy supply development. The increased funding depends upon enactment of legislation authorizing loan guarantees and State revolving funds and extending coverage of the assistance for the impacts of a wider range of energy projects than those now covered. Assistance will be provided by DOE to the States through the Farmers Home Administration. This assistance covers only inland areas affected by rapid energy development, since a separate program administered by the Department of Commerce provides assistance to coastal areas so affected.

Conclusion

Overall, the budget submitted for FY 1981 is a balanced approach toward increasing the Nation's domestic energy supplies through greater energy-efficiency and the use of renewable energy resources. These two elements—conservation and the many forms of solar energy—are integral parts of a long-range energy strategy developed by the President for meeting the energy needs of the Nation through the end of the century. Furthermore, these programs have distinct advantages for preserving and enhancing our way of living by increasing employment, protecting our fragile environment, and improving our international security. Therefore, we ask that this package be given every consideration for funding at the full levels requested.

SUPPORTING STATEMENT: CONSERVATION AND STATE AND LOCAL ASSISTANCE

The subject of my testimony this morning is the President's fiscal year (FY) 1981 budget request for Department of Energy's (DOE's) Office of Conservation and Solar Energy (CS).

This portion of my testimony will cover those programs which are designed primarily to further energy conservation, to assist State and local governments, and to develop more effective techniques for energy storage. The overview statement emphasized the importance of these programs to the achievement of our national energy objectives and the priority which the Department places on their effective implementation. For FY 1981, the President is requesting $1,139.1 million for these programs, which is approximately 64 percent of the President's FY 1981 budget for the Office of the Assistant Secretary for Conservation and Solar Energy.

This request represents an increase of almost $260 million over the current fiscal year, most of which is directed to four specific areas: (1) State and local grant programs to be supported under the proposed Energy Management Partnership Act; (2) the existing grant program for schools and hospitals; (3) a major energy information campaign; and (4) Energy Impact Assistance for communities most severely affected by energy development activities.

The programs that I will discuss today are designed largely to facilitate the decisions and actions to conserve which must ultimately be made by energy users. For the most part, the Federal Government cannot (and should not attempt to) directly control the choices made by individuals, businesses and institutions with respect to their use of energy. Instead, Federal conservation programs must be designed to overcome the barriers which prevent or deter individual actions supportive of conservation. These barriers fall into five broad categories:

Artificially Low Energy Prices -- For years the American consumer has been protected from the realities of the world market. The current policy of gradual price decontrol will reduce this barrier over several years. Even after decontrol, however, energy will still be underpriced. External costs, such as the effects of oil and gas use on the environment or the effects of large oil imports on the economy, the balance of trade, or national security, will not be reflected in the market value. Although price controls have a significant effect on the economic incentives for conservation, these measures are not addressed by the Department's budget outlay programs which I will discuss today.

Imperfect Information -- For the private market to work well, purchasers must know enough to make rational economic decisions. That is often not the case with respect to information on conservation measures. Some individuals do not know the basic concepts of energy efficiency. Even knowledgeable individuals can have trouble discovering the relative energy efficiencies of competing products or the full initial costs of products where installation costs are involved.

Private Sector Investment Distortions -- Ideally, investment decisions should be based on the appropriately discounted cost of an item throughout its useful life. Instead, consumers have a strong tendency to focus on the initial cost in deciding what to buy, and they tend to demand a relatively short payback period. This causes a bias against conservation because the costs of conservation are borne immediately while its benefits accrue slowly but steadily in the future. Moreover, many households and institutions have little opportunity to invest even in conservation measures with a rapid return because they lack discretionary funds or access to credit. There is also some evidence that many companies demand a higher rate of return from energy-saving investments than they do for mainstream business investments. This may be done to compensate for uncertainties about the performance of new technologies and future energy prices.

Constraints on Private Sector Research and Development -- The private sector is not investing in energy-related research and development at levels commensurate with the overall importance of conservation. In some cases, energy research involves risks which the private sector is unwilling to bear alone. In others, private firms have been reluctant to spend resources for research and development on energy if they believe it is likely that their competitors will share any benefits without comparable investments. There are also few funding sources for small-scale, applied research.

Legal and Regulatory Constraints -- There are other barriers to conservation that can be described generally as legal and institutional problems, most of which are beyond the reach of the federal government. They include local building codes and zoning restrictions that prevent or deter conservation-oriented improvements to buildings, rates for electricity that decline as the quantity used increases.

To facilitate energy conservation, the Department is implementing a range of programs designed to overcome each of these barriers. While the emphasis of the Department's efforts differs depending on the characteristics of end-use sector affected, each program area encompasses activities which fall into most or all of the following general categories:

Public Information — Information is the first requirement of a strategy based on freedom of individual choice. Information of all kinds, including advertising, publications, product labels, films and exhibits, tells consumers and producers what they need to know to make rational decisions about energy use.

In 1980, the Department will air 24 new television and radio spots and will publish 12 new ads in national and local print media. Altogether these ads will reach an estimated 75 million Americans at least once. The Department will distribute approximately 25 million pieces of free literature including pamphlets, manuals, and reports of all types. The Department will conduct about 13,500 training sessions on conservation subjects that will reach about 325,000 people. These efforts are to be continued and strengthened in FY 1981, and a major energy information campaign will be added.

Financial Incentives — Financial incentives, such as grants, tax credits and loan guarantees, are also a potentially effective method for encouraging energy conservation. The benefits to society of many conservation investments exceed the direct savings realized by individual investors. In these situations, financial incentives such as tax credits, loan subsidies and guarantees and grants are important.

Financial assistance is also appropriate as a means of mitigating the impact of higher energy prices and energy development activities on those most adversely affected -- low-income households, small and minority businesses and rural communities.

In 1980, the Department will offer grants for conservation investments in low-income homes, schools, hospitals and other institutional buildings, as well as to support State and local conservation programs. The Department also plans to provide loan guarantees and other support for electric vehicle manufacturers and municipal waste programs. Other important financial incentives for conservation include certain tax benefits administered by the Treasury Department and assistance programs administered by the Transportation and Housing and Urban Development Departments.

In FY 1981, the Department's budget authority for these programs would exceed $550 million.

Research and Development -- Government-sponsored research and development is a tool for promoting conservation that is similar to financial incentives. Depending on the state of the technology, Federal support is directed at achieving a variety of different objectives, including the characterization of end-use market requirements, technical and cost assessments, prototype development and testing, full-scale demonstrations and associated commercialization activities. The overall objective of accelerating the widespread commercial application of conservation technologies is continually emphasized. Encouraging maximum industry participation through cost sharing and broad dissemination of research results is one method of achieving this overall objective. In 1980, the Department will have under way more than 250 research and development projects aimed at conservation improvements. Of these, more than 60 projects will produce prototypes or test units, and more than 90 projects will produce technical reports describing results. Again, these programs will continue in FY 1981, with a greater focus on the most promising energy conservation technologies.

Regulatory Measures -- In most cases, direct regulation of individual or business activity in order to achieve energy conservation objectives should be undertaken only as a last resort. However, where the market, even as supplemented by other Federal action, will not reach levels of conservation that are socially or economically desirable, regulations are being used to require actions intended to further conservation. The primary examples of such regulatory programs are the automobile fuel economy standards being implemented by the Department of Transportation, the new Building Energy Performance Standards recently proposed by DOE, the Appliance Efficiency Standards now under development, and Residential Conservation Service for which final regulations were issued last November. In FY 1981, DOE will require continued budget support for these efforts.

Another area of regulatory activity involves the development and implementation of programs intended to reduce energy use during emergency energy situations. Although these actions would inevitably impose hardships, they are designed to minimize and more equitably distribute the serious economic dislocations that can result from disruptions in energy supply. With the recent enactment of the Emergency Energy Conservation Act, and the deteriorating situation in Iran, the Department will require significant resources in this area during FY 1980 and FY 1981.

A final area of Federal regulatory activity is the reform of government regulations at the Federal, State and local level which deter conservation.

Adequately supported Federal programs in each at these four categories are essential if we are to establish a truly effective and equitable national energy conservation program. While most of the Federal government's current activity in this area falls within the Department's Office of Conservation and Solar Energy, it is important to consider these efforts in the context of other programs and policies being implemented by the Department, as well as by numerous other Federal agencies. Therefore, in the description that follows of the specific program activities of CS, I have attempted to provide a brief overview of our strategy for each end-use sector or technology area.

CONSERVATION PROGRAMS

Under the Deputy Assistant Secretary for Conservation, there are four distinct program offices. Three of these offices are designed to conserve energy in each of the major end-use sectors: Buildings and Community Systems; Industrial Programs; and Transportation Programs. The other office is designed to support the development of technologies which can be applied in all sectors: Energy Storage Systems and Energy Conversion and Utilization Technology.

BUILDINGS AND COMMUNITY SYSTEMS

The President's FY 1981 budget request for the Office of Buildings and Community Systems (BCS) is $97.6 million, a reduction of $5.8 million from the FY 1980 budget authority. The reduction reflects a number of shifts in program activity and the pursuit of building and community conservation objectives through programs outside the BCS budget area. The reduction does not reflect a lessening of DOE's commitment to conservation in this important area.

Strategy

The Federal strategy in the buildings and community area reflects the diffused and varied nature of energy consumption in this sector. Fully 37 percent of the nation's energy is consumed by this sector.

The Federal Government's buildings conservation programs include financial incentives, in the form of tax credits, grants and proposed loan subsidies, as well as information programs, efficiency standards for new buildings and appliances, and research and development activities. Numerous Federal agencies are involved in this overall effort. DOE's Office of Buildings and Community Systems (BCS) is the focal point for most of the information, regulatory and R&D activities, but its annual budget represents less than 10 percent of the Federal Government's total expenditures (including tax expenditures) on buildings energy conservation.

The activity of BCS is shaped along program thrusts, each representing a major energy end-use area. The thrusts are:

- Consumer Products, which include appliances, furnaces, air conditioners, hot water heaters, lighting equipment, heat pumps and similar building elements.

- Building Systems, which include the building envelope and the equipment in the building as it functions as an integrated energy system.

- Community Systems, which include the facilities that provide energy to a community, such as district heating and urban waste-to-energy projects, and energy-efficient community planning.

BCS also has responsibility for the Federal Government's own energy conservation activities and this activity is placed in a fourth BCS division along with responsibility for systems analysis and emergency planning activities.

Consumer Products

The Consumer Products programs are funded primarily from two budget lines, Technology and Consumer Products and Appliance Standards.

The $22.2 million requested for Technology and Consumer Products will support the development and field testing of advanced heating and cooling equipment. The budget supports research on condensing mode gas- and oil-fired burners which will deliver more than 90 percent seasonal efficiencies, compared with current efficiencies of 65-70 percent. The DOE lighting program is developing lamps, fixtures, ballasts and daylighting techniques which could result in a 20 percent energy saving by 1985.

The requested budget is a decrease of $7.4 million from FY 1980. In FY 1980 Congress added $9.0 million to this budget to initiate the 40KW fuel cell field demonstration.

The $7.9 million requested for Appliance Standards is an increase of $1.9 million from the FY 1980 budget authority. These funds support a regulatory program that is developing minimum energy efficiency standards for 13 appliances which consume about

19 percent of the Nation's primary energy. The funding will ensure that the appliance test procedures, labeling requirements and standards are implemented effectively and that the program has the capacity to facilitate the introduction of new, energy-efficient appliances.

Accomplishments and Objectives

- The program was instrumental in the commercial introduction in 1980 of four different models of gas- and oil-fired burners with system efficiencies over 80 percent.
- Two products developed under the lighting program were introduced in FY 1980 into the commercial market: an advanced circline lamp marketed by Sears and solid state ballasts for 40 Watt fluorescent fixtures marketed by Beatrice Food.
- Mandatory energy efficiency standards will be issued in December 1980, covering nine appliances, including furnaces, air conditioners and hot water heaters.

Building Systems

The programs in this area are funded primarily through the Building Systems and Residential Conservation Service appropriations. The requests in these areas are up slightly over 10 percent in the FY 1981 budget to $20.1 million and $5.2 million, respectively. The programs focus on reducing energy waste in the Nation's existing buildings and on insuring that new buildings are energy efficient. DOE estimates that at least 40 percent of the energy used in the Nation's buildings is wasted.

The Building Systems activity supports research, development and demonstration programs to advance the understanding of energy use in buildings. The 1981 program will focus on energy savings that can be achieved in ventilation, service water and illumination. A high priority will be given to identifying and reducing any health hazards in cellulose and urea formaldehyde insulation. Studies will examine the interior air quality of highly efficient homes and initiate efforts to solve any problems in this area. The program will examine innovative structures such as earth-sheltered and foam buildings.

The development of Building Energy Performance Standards is also supported by this item. The performance standards apply to the design energy requirements of whole buildings. By contrast, prescriptive standards set forth requirements for walls, ceilings, windows and other building components. The performance standards focus more directly on energy use, allow greater flexibility, and encourage the use of solar energy. The standards are expected to save more than 29 quads of energy between 1980 and 2020. The FY 1981 work will extend the standards to restaurants and industrial buildings, continue the revision of existing building codes so they can be equivalent to the standards, upgrade the computer program (DOE-2) for better analysis of active and passive solar systems, develop hand-held and desk-top calculators that determine a building's design energy requirements and provide training for building code officials.

The program funded by the Residential Conservation Service appropriation requires that large gas and electric utilities provide information on conservation and solar energy to their residential customers, offer home energy audits, and make arrangements for installing and financing retrofit measures. Approximately 3,000,000 home energy audits will be conducted in FY 1981. DOE will provide technical assistance to States, utilities and home heating suppliers in the planning and implementation of the program. DOE also supports the Department of Treasury in developing standards for energy conservation measures eligible for the residential energy tax credit.

Accomplishments and Objectives

- The proposed rulemaking for the Building Energy Performance Standards was published in November, 1979, and the final Standards are scheduled for publication in August, 1980. The Standards bring together a broad spectrum of research into a national strategy for energy efficient new buildings.
- The Final Rule for the Residential Conservation Service program was published in November, 1979, and during 1980 the States and utilities are developing plans and starting to implement them.
- Construction was being completed in 1980 for a facility that will test heat flow, infiltration and moisture migration in wall sections.

Community Systems

The programs in this area are funded primarily from the Community Systems, Urban Waste and Small Business appropriations. The FY 1981 request for Community Systems is $15.5 million, a reduction of $1 million from the prior year reflecting a decision to delay development of heat-pump based community energy systems and to provide for future support of local energy planning activities through the proposed Energy Management Partnership Act. The Urban Waste request is $10.9 million, down $2.1 million from the prior year. This reduction is a result of reduced requirements for R,D&D of methane-from-landfills, domestic waste water treatment and small scale systems. The Small Business request is up slightly to $750,000.

The energy-saving opportunities in these programs range from subdivision developments to comprehensive planning in major metropolitan areas. The program includes a technological element that supports research, development and demonstrations of innovative energy systems, such as Integrated Community Energy Systems and district heating. During 1981, construction is expected on three integrated systems. The potential for large scale heat pump systems will be assessed. A number of district heating projects will be continued.

The program also supports a community planning and management activity. Under the Comprehensive Community Energy Management Program (CCEMP), the participating communities will move toward the implementation of their plans in FY 1981. The Site and Neighborhood Design program will look at modifications in code regulations to allow more energy efficient designs.

The President's Clearinghouse for Community Energy Efficiency will be broadened to include resource recovery and support for technical assistance teams in the DOE regional offices.

The Urban Waste appropriation supports applied research on waste-to-energy systems, demonstrates a wide range of technologies and seeks to find solutions to generic institutional and economic problems. During FY 1981 emphasis will be placed on the development of small scale systems. A Refuse Conversion to Energy facility in Pompano Beach, Florida, which converts municipal solid waste and sewage sludge into methane, will start operating under commercial conditions. The ANFLOW system, an upward flowing digester process, will be scaled up to 50,000 gallons a day and will begin operation in Knoxville, Tennessee. Support will continue for 12 existing projects to recover methane from landfills.

The Small Business appropriation is aimed at reducing the energy costs of the Nation's 9.4 million small businesses. The program includes guidebooks for different small business sectors, outreach to trade associations and state energy offices and research to determine which conservation measures are of greatest importance to small businessmen.

Accomplishments and Objectives

- Four grid connected Integrated Community Energy Systems have resolved issues of financing, ownership, operation and rates and one is well into construction.

- The 22 communities which participated in the Comprehensive Community Energy Management Program have completed the development of local action plans and are starting to implement them.
- DOE has played a leadership role, in cooperation with others, to develop an advanced treatment and energy production system at the Experimental Prototype Community of Tomorrow at Disney World.

Other Programs

The remaining BCS programs are financed by the Analysis and Technology Transfer and Federal Energy Management Program budget requests. The Analysis and Technology Transfer request increased slightly to $5.9 million. The Federal Energy Management Program request has increased sharply from $400,000 to $2.7 million. The Office also received $3.7 million for the Emergency Building Temperature Restrictions program in FY 1980, but this program is expected to end this year.

The goal of the Analysis and Technology Transfer activity is to encourage early acceptance of energy efficient products and services. Conservation information is provided to State and local officials, consumers, architects and engineers, planners, utilities, educators and researchers and building industry trade associations. DOE uses technical and nontechnical publications, fact sheets, how-to user manuals, program briefs, executive summaries and conference reports based on research results. Research is undertaken to determine how to motivate consumers to conserve energy. For example, the Residential Utility Billing System (RUBS) plan was developed. RUBS is a pro-rata utility billing system for tenants that results in energy savings of 10-15 percent.

The Federal Energy Management Program supports the Federal Government's own energy management program. The Federal Government is the single largest energy user in the country, accounting for 2.2 percent of the Nation's energy use. The substantial increase requested in FY 1981 would enable DOE to exert leadership in this area by initiating energy conservation demonstrations and by monitoring more closely the performance of Federal departments and agencies. DOE is also seeking $2.3 million in FY 1980 supplemental funds to fulfill the requirements of existing Congressional and Presidential mandates; fully evaluate Federal agency energy conservation plans in buildings and general operations; develop and implement an effective energy data collection and reporting system; develop and implement an intra-agency technical and information exchange program; and provide technical assistance to Federal agencies in energy conservation.

Accomplishments and Objectives

- o A consumer motivation demonstration was held in three U.S. and two Canadian cities where Energy Cost Indicators, energy usage display meters, were installed to determine their impact on energy use.

- o During FY '80, DOE is developing the Federal 10-Year Building Energy Conservation Plan. The goal of the plan is a 20 percent reduction in energy use per square foot in existing buildings and a 45 percent reduction in new buildings.

INDUSTRIAL PROGRAMS

The FY 1981 budget request for the Industrial Programs Office is $58.9 million, a reduction of $1.4 million from the budget authority available in FY 1980. This reduction is not for any specific project or activity but is the net result of the diverse activities and phases of the projects within the program.

The FY 1981 program, in general, is designed to deepen the penetration of previously demonstrated new technologies and broaden the base of new technologies by stressing the completion of previously initiated projects.

Strategy

The potential for energy conservation in the industrial sector is quite high. The sector consumes an estimated 38 percent of all the energy in the United States and most industrial processes are still energy inefficient. This inefficiency is due primarily to the development of the existing industrial infrastructure during several decades of abundant and low cost energy. The diversity of energy using processes and equipment suggests that an effective conservation effort must be tailored to the specific requirements of individual industries.

Historically, industry has gradually increased the energy efficiency of its equipment and processes. In response to higher energy prices and a greater risk of supply interruptions, this trend of improved industrial energy efficiency has increased in recent years. Even with these most recent efficiency improvements, however, there remain significant opportunities for major energy savings.

As in the buildings sector, the opportunity for energy savings lies both with the more wide-spread and effective implementation of existing energy technologies and the accelerated introduction of new, more advanced technologies.

The Federal strategy for accelerating energy conservation in the industrial sector includes: (1) Information programs designed to provide the types of technical and economic data on conservation opportunities needed by industrial managers; (2) Financial assistance, such as tax credits, for selected conservation investments; (3) Research and Development, cost shared with industry, to accelerate the development and demonstration of new, higher risk energy conservation technologies which will not be pursued expeditiously by the private sector alone; and (4) Regulatory Programs, including the required reporting of energy use data and the mandating of utility rate and energy pricing policies which are conducive to the more efficient use of energy by industry.

Each of these components of the Federal strategy for industrial conservation is directed at one or more of the factors which are now inhibiting or preventing effective action. Because industry generally has easier access to the financing required for major conservation investments and direct Federal regulation of industrial energy efficiency does not now appear warranted (or technically feasible), the emphasis of the Federal strategy has been placed on information programs and RD&D. The FY 1981 budget reflects this emphasis and places particular priority on the development of those technologies having the highest energy savings potential in the near and mid term. Continued support for all of the program categories, however, is essential.

Accomplishments and Objectives

During FY 1979 and the beginning FY 1980, the Industrial Programs Office had several notable accomplishments, including:

- An additional two installations of the fume-burning coil coating curing system bringing the total systems on-line to fourteen;
- An additional five foam finishing installations were brought on line, for a total of fourteen in the textiles industries in the southeast;
- Completion of prototype testing of a high efficiency slot forge furnace in Maine;
- Establishing advanced topping cycle cogeneration demonstration projects in four industrial applications, including textiles, chemicals, food processing and metal fabrication.
- Initiation of conversion of waste polypropylene to fuel oil in a full size demonstration by a petrochemical concern.

The objectives of the Industrial Programs Office for the remainder of 1980 include, among others:

- Sponsoring a total of 26 workshops and seminars on improved boiler operation techniques, cogeneration and high efficiency electric motors.
- Full scale industrial demonstrations of new technologies, including textile foam processing, improved slot forge furnaces, high temperature ceramic recuperators and plastic waste to fuel oil conversion;

- Initiation of contracts to develop an environmentally acceptable coke-making process;
- Issuance of final reports to Congress on the feasibility of standards for electric motors and pump efficiency and applications of the second law of thermodynamics;
- Continued reporting on the progress of industry toward increasing energy efficiency and the use of recovered materials.

Industrial Programs Budget Summary

The FY 1981 budget request for the Industrial Programs Office falls under four specific subprogram areas.

The waste energy reduction subprogram supports the development of technologies which will permit efficiency improvements and fuel substitution in processes that are common to many industries. The FY 1981 budget request of $19.8 million for these activities is a 20 percent increase over FY 1980. Most of these funds are for the continuation of projects begun in earlier years. Completion of the ceramic recuperator demonstration and a number of one-time studies during FY 1980 are offset by increased funding for the demonstration and hardware phases of industrial heat pumps, fluidized bed boilers, lube oil rerefining and water-to-water heat pumps.

The FY 1981 request of $20 million for industrial process efficiency is about 3 percent lower than the budget authority available in FY 1980. These funds support the research and development of process-specific technologies, with applications in the most energy-intensive industries, including steel, aluminum, paper, textiles, agriculture and food processes. Efforts are underway to determine technologies suitable for Federal support in the chemical and petroleum refining industries. During FY 1981, activities will include testing of commercial-size aluminum reduction cells, and demonstrations of mechanical dewatering of paper, efficient motors and crop drying systems. The request reflects the FY 1980 completion of several one-time studies and the slot forge deployment and analysis, and significant funding increases to support the hardware phases of ongoing R,D&D projects. It does not include follow-on funding for the formcoke demonstration project which was funded by Congressional add-ons to the FY 1980 budget. The evaluation, design analyses and process testing have not been completed and are expected to continue into FY 1981 after which the results must be carefully reviewed prior to a decision on continuation.

During FY 1981, the Industrial Programs Office will continue to support a broad spectrum of activities designed to further develop and commercialize industrial cogeneration systems. The budget request includes $12 million for this purpose, a 5-percent increase over FY 1980 levels. Emphasis will continue to be placed on cogeneration systems that minimize oil and gas consumption, including fabrication of a multi-fuel diesel topping system and installation of an advanced coal-fired, high back pressure steam system. Again, funding decreases resulting from the completion of one-time studies during FY 1980 are more than offset by the increased funding for hardware design, fabrication and installation of cogeneration projects begun in earlier years.

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The FY 1981 request of $4.5 million for implementation and deployment is a $5.3 million decrease from the FY 1980 level. The objective of this subprogram is to stimulate the expeditious implementation of new, as well as existing conservation technologies. The activity supported includes the industrial reporting program, analytical support to program-wide project selection, as well as a range of information dissemination activities. The major reasons for the decreased funding requested in FY 1981 are completion of the Congressionally mandated studies under the National Energy Conservation Policy Act and several industry-specific implementation plans. Emphasis in FY 1981 will be placed on the continued implementation of a coordinated, systematic program of information transfer, including the development and distribution of publications, the conduct of workshops, and continued support of the Energy Analysis and Diagnostic Centers.

TRANSPORTATION PROGRAMS OFFICE

The President's FY 1981 budget provides $113 million for DOE's Office of Transportation Program, a reduction of $3.4 million from the budget authority available in FY 1980. This ~~decrease is~~ attributable to the Department's decision not to support a third gas turbine development contractor and program redirection in other transportation areas.

Strategy

The transportation sector, while accounting for only 26 percent of U.S. energy demand, consumes 53.7 percent of the nation's supplies of petroleum products. Use of trucks and cars alone accounts for about 40 percent of U. S. petroleum requirements.

During the next 10 years, the major opportunities for energy savings lie in further improvements to the fuel economy of new cars and trucks and the more efficient use of the existing transportation systems, including greater use of ridesharing and public transit, improved car maintenance and more fuel efficient driving techniques.

For the long term, however, it is essential that the nation's transportation system move away from its heavy dependence on petroleum products through the introduction of vehicles capable of using a variety of alternative energy sources, including electricity, even more efficiently. Because this longer term transition requires basic changes in the technology and structure of today's transportation system, it is critical that we continue efforts designed to support and accelerate this transition.

Programs directed at achieving both these near and long term objectives are being implemented by DOE in close coordination with the Department of Transportation and other Federal agencies.

As in other program areas, the Department's transportation program involves information dissemination, financial assistance, and research, development and demonstration, designed to lead to the early commercialization of fuel efficient technologies, including technologies capable of using energy sources other than petroleum. In each of these areas, close cooperation with other divisions of DOE, and other Federal agencies is pursued. For example, the automobile fuel economy standards are implemented by the Department of Transportation based on fuel economy tests performed by the Environmental Protection Agency and supported by the distribution of about 15 million gas mileage guides each year by DOE. A special effort is now underway with the Department of Transportation to establish the Federal government's long term transportation R&D strategy. The alcohol and alternative fuel programs being implemented by other Department programs are also being coordinated with and supported by vehicle research programs within the Office of Transportation Programs.

Accomplishments and Objectives

During FY 1979 and first quarter of FY 1980 the major accomplishments of the Transportation Programs office included:

- A gas turbine engine containing ceramic turbine nozzle vanes and heat exchangers successfully completed 4,700 miles of road testing in a truck application.
- Pilot testing was completed and regular revenue service began on a turbocompound diesel heavy duty truck engine. Potential fuel savings are on the order of 8 percent.

- The road and track testing of a prototype organic Rankine bottoming cycle for heavy duty trucks is underway. The fuel economy improvement expected approaches 15 percent.
- Five gas turbine buses with ceramic components will be placed in revenue service in the city of Baltimore by mid-summer.
- Negotiations for a second round of demonstrations involving 300 vehicles at an additional 8 sites are underway. General Telephone and Electronics, for example, is placing 75 EV's at 3 sites. GTE will fund $1.7 million and DOE $631,724 for this year's demonstration program.
- Electric vehicle demonstrations involving 190 vehicles are being negotiated in 10 State and local government jurisdictions. Second round selections, now in progress, will involve another 100 vehicles and 10 additional sites.
- In alternative fuels R&D, five automobiles were modified and tested for use of straight alcohol to demonstrate three competing fuel management systems.
- The Driver Energy Conservation Awareness Training (DECAT) program has graduated nearly 2,000 drivers from its driving/classroom course and has begun to develop new instructors from the public and private sectors. These new instructors are initiating DECAT programs nationwide.

During the remainder of calendar year 1980, the Transportation Programs Office has established a number of objectives, including, among others, the following:

- o Begin development of 2 gas turbine concepts, with ceramic components, for passenger cars, which have the potential to increase fuel economy by 30 percent, meet stringent emission standards, and burn a wide variety of fuels.
- o The Nationwide distribution of the auto gas mileage guides, the conduct of 40 Federal agency ridesharing workships and support of a film and training program on energy conserving driving techniques.
- o Completion of initial testing of the Stirling engine vehicle and initiation of commercialization planning.
- o Addition of 350 vehicles to the electric vehicle demonstration; testing and evaluation of 2 prototype electric vehicles designed from the ground up.
- o Initiation of controlled tests of the long term effects of gasohol and initiate engine tests of new lubricants and synfuel blends; and
- o By mid-summer, place in revenue service in Baltimore five gas turbine buses with ceramic components.

Transportation Program Budget Summary

The $113 million budget for the Office of Transportation Programs is divided into four categories, plus program support.

Vehicle propulsion R,D&D accounts for $55.9 million of the total FY 1981 request for this office. This is a reduction of about 10 percent from the FY 1980 level. DOE's support of gas turbines will continue to place major emphasis on the development of ceramic materials and improved aerodynamic performance. The FY 1981 request will also support continued development of the Stirling engine, the initiation of the Stirling engine commercialization effort, and completion of the diesel and alternative fuel phases of the urban gas turbine demonstration.

The $42.1 million request for electric and hybrid vehicle R,D and D will support the addition of 350 vehicles to the demonstration program, completion of the Near-Term Electric Test Vehicle testing and evaluation, loan guarantees for manufacturers, as well as a number of supporting analytical and developmental projects. This request continues the efforts in product improvement and near-term battery development by shifting a portion of this effort to Energy Storage Systems and increases support for advanced hybrid propulsion subsystems, continuously variable transmissions and commercialization activity.

The $6.7 million request for transportation systems utilization remains unchanged from FY 1980. This program area develops and distributes information on fuel economy and energy conserving operation and maintenance techniques. Through information, technical assistance and selected research programs, it also supports conservation in all intercity passenger and freight transportation modes.

The alternative fuel utilization program is budgeted at $5.3 million for FY 1981, also unchanged from FY 1980. The major emphasis of earlier years on alcohol fuels will be continued in FY 1981 to support extensive reliability testing and associated development activities. In parallel, minor efforts on synfuels and hydrogen will be phased out in FY 1981.

ADVANCED CONSERVATION TECHNOLOGIES

Under the new organization for the Office of Conservation and Solar Energy, there is created an Office of Advanced Conservation Technologies. This office will focus on the research, and development of conservation technologies which have applications across all end-use sectors and which require far reaching technological development. This office will combine the functions of the existing Energy Storage Systems program and new activity involving the support of advanced conversion technology.

ENERGY STORAGE SYSTEMS

The FY 1981 budget request provides $71.8 million for Energy Storage Systems, an increase of about 8 percent over the FY 1980 budget. During the past year, this program office was transferred to the Office of the Assistant Secretary for Conservation and Solar Energy and now is under the direction of the Deputy Assistant Secretary for Conservation. The major increase in budget authority is in near term battery development.

Strategy

The goal of Energy Storage Systems is to develop and demonstrate reliable, low cost, safe and environmentally acceptable energy storage systems for use in the buildings, industry, transportation and utility sectors. Unlike the programs discussed above, Energy Storage systems is designed to support the development of a group of similar technologies which have applications in all sectors. Consequently, the research, development and demonstration activities of this office must be closely coordinated with the sector-specific programs which utilize storage technologies.

Improved storage systems are an essential component to the achievement of several national energy objectives, including increased reliance on solar energy, the displacement of oil and gas by electricity generated from other fuels, and the recovery and productive use of waste heat. Storage systems permit intermittent energy sources such as direct solar and wind energy, to provide continuous service. They permit coal and nuclear powerplants to provide a greater share of peak electricity demand by storing energy generated during off-peak hours. Finally, they permit the more flexible use of electricity through improved battery development.

Since the different applications of storage technology require different amounts and types of energy to be stored for various duty cycles, several energy storage technologies are needed. The major thrusts of the strategy are to develop:

- For electric and hybrid vehicles--improved propulsion batteries and flywheel regenerative braking systems;
- For heating and cooing buildings--aquifer storage of hot and cold water for seasonal applications, phase change thermal storage for daily cycling applications, and phase change and chemical heat pump storage for solar applications.
- For solar conventional electric utility applications--batteries, thermal, mechanical, magnetic and underground (compressed air, pumped hydro) storage for utility load leveling and for use in solar electric systems.

- For industrial and multi-purpose uses--energy saving electrochemical processes, retrofit thermal storage for industrial heat recovery, and economical processes for producing hydrogen.

These strategies have been translated into quantitative performance and cost objectives for each technology under development. The approach being used to attain these objectives includes:

- Federal support of research and development in high-risk areas where the private sector is unwilling or unable to invest.
- Joint support of research and development when developmental risks have been reduced sufficiently that industry is willing to share the cost.
- Transfer of Federal information to private industry when the point is reached where the private sector will assume full responsibility and proceed with commercialization of the technology.

Accomplishments and Objectives

During the past year, industry has cost-shared energy storage R&D by providing almost 30 percent of the total DOE support. The DOE-funded R&D activities are being carried out by industry (49 percent), national laboratories (33 percent), other government agencies (14 percent), and universities (4 percent).

Some examples of recent accomplishments include:

- For electric and hybrid vehicles: The first full size near-term electric vehicle battery cells (lead-acid, nickel/iron, and nickel/zinc) have been tested at the National Battery Test Laboratory (NBTL).

- For heating and cooling buildings: Field tests of sensible heat and cool storage systems have been conducted and second generation phase-change and chemical heat pump storage components have been laboratory tested.

- Three sites have been selected and preliminary designs for first generation underground pumped hydro and compressed air energy storage systems have been completed. The design for a 10 KWH super-conducting magnetic energy storage unit has been completed and hardware procured to begin construction for Bonneville Power Authority.

During the remainder of 1980, Energy Storage Systems expects to achieve the following objectives, among others:

- Complete fabrication of two batteries, zinc/chorine and nickel/iron, for vehicle on-road tests.

- Complete fabrication of full-size hydrogen electrolyzer for test as a special source of hydrogen for chemical use.

- Complete design of a waste heat storage system for sterilization processes in a food processing plant in North Carolina.

- Complete construction support for a zinc/chlorine battery pilot plant in New York to produce 250 utility load-leveling batteries per year.

Energy Storage Systems Budget Summary

The FY 1981 budget for Energy Storage Systems is split into two major categories: Battery Storage; and Thermal and Mechanical Storage.

The $38.5 million budget request for the Battery Storage program area is a 17 percent increase over the FY 1980 level, with most of this increase being directed to near term development of zinc/chlorine electric vehicle batteries and to accelerating the capability and activity of the National Battery Test Laboratory. Increased support will also be provided for the development of dispersed, load leveling batteries for use in electric energy systems and the initiation of a third generation electric vehicle program to integrate advanced battery technologies with advanced electric vehicles.

The FY 1981 budget request for thermal and mechanical energy storage is $32.3 million, slightly greater than the budget authority available in FY 1980. The major shifts in subprogram emphases include increased support for the near-term development of underground mechanical storage systems and the elimination of funding for hydrogen storage, transport and use. The major emphasis of the program will continue to be the development, demonstration and testing of thermal storage technologies for solar applications.

ENERGY CONVERSION TECHNOLOGY

The budget request provides $11 million to support more basic research and development of energy conversion technologies. This is a new activity to be initiated in FY 1981, although some support for research of advanced conversion technologies was previously supported by a former division of the Department, Energy Technology, and the Energy Research and Development Administration. Similar to the role of Energy Storage Systems, this program area will support technologies which have applications in all end-use sectors. Activities in the general areas of combustion, controls, materials processes and biochemical technologies are being considered. A research agenda is currently being developed in consultation with the academic and private sectors.

ENERGY INFORMATION CAMPAIGN

To support the Department's efforts to inform consumers of the opportunities and need for energy conservation in the home and in personal transportation, the FY 1981 budget requests $50 million for a major, nationwide energy information campaign. The bulk of these funds would go to the purchase of media advertising necessary to ensure that the campaign is both highly visible and well coordinated. The paid advertising campaign will be augmented by an aggressive public relations and media event program, an approach which was demonstrated to be effective by the Department's Low Cost/No Cost pilot campaign in New England. It will also be designed to be complementary to, rather than competitive with, the energy conservation messages currently being promoted by other Federal programs and private industry. For example, it could serve to heighten the awareness of and participation in the Residential Conservation Service which will be implemented nationwide by States and utilities beginning late in 1980.

This program is similar to paid advertising programs already in place in 11 other countries and would help highlight the national importance, given recent world events, of near-term conservation actions.

STATE AND LOCAL ASSISTANCE PROGRAMS

Under the new organization for the Office of Conservation and Solar Energy, the Deputy Assistant Secretary for Energy Assistance Programs will have responsibility for overseeing the Department's major grant programs for State and local governments, as well as for other institutions and individuals. These programs include .

the existing Institutional Buildings Grant Programs, the Weatherization Assistance Program for low-income households, the Small Scale Technology, and Inventors Programs, as well as the State and local grant programs to be funded under the still pending Energy Management Partnership Act. This area also will support the Department's responsibilities under Title II of the recently enacted Emergency Energy Conservation Act. In total, the FY 1981 budget request provides approximately $579 million for these efforts, an increase of approximately $121 million over the FY 1981 level.

ENERGY MANAGEMENT PARTNERSHIP ACT

The FY 1981 budget request provides $151.6 million to support grants to States and local governments under the President's proposed Energy Management and Partnership Act (EMPA). This is about $80 million more than the budget authority available in FY 1980 for the existing state grant programs authorized by EPCA and ECPA, the Energy Extension Service, and emergency conservation programs. The State activities supported by these existing programs, such as the Nationwide Energy Extension Service, will be extended by EMPA, which is intended to consolidate and strengthen State energy activities, rather than significantly redirecting them.

In light of the important role of local governments in supporting conservation and solar energy actions, the Administration is also seeking legislative and budget authority to make grants directly to the local governments of moderate and large cities and to set aside a portion of the funds granted to States for the support of energy programs initiated by smaller cities and towns.

Because of the regional and sectoral diversity of the energy problem, it is essential that State and local governments be deeply involved in the development and implementation of energy programs. This is true particularly in the area of conservation and solar energy. The enactment and funding of EMPA will go a long way toward ensuring that State and local governments have the resources to take such a role.

INSTITUTIONAL BUILDINGS GRANTS PROGRAMS

The FY 1981 budget includes $202.5 million for the third year of matching grants to support detailed energy surveys and conservation and solar investments in existing, non-profit school and hospital buildings. This program provides the only Federal financial assistance to support conservation investments in buildings owned by public or non-profit institutions. During FY 1979, program regulations were developed and finalized, and initial grants for preliminary energy audits and energy audits were made. To date, 45 State plans have been approved for the second phase of the program--technical assistance and energy conservation measure grants. The first grants under this second phase will be made within the next month, with a second grant cycle to be completed by the end of FY 1980. Appropriation of this request will bring the total available funds to $440 million of the $900 million originally authorized. The administration will be requesting legislation to extend the authorization one fiscal year to enable the full $900 million to be appropriated.

Authority for a parallel 2-year program to support simple and detailed energy audits of local government and public care institution buildings will be completed in FY 1980.

WEATHERIZATION ASSISTANCE PROGRAM

The FY 1981 budget continues support, at the full authorized level, of the Weatherization Assistance Program for low-income households, particularly the low-income elderly and handicapped.

In December, 1979, the last month for which complete data is available, approximately 17,000 homes were weatherized by the program. This brought the total number of homes retrofitted under DOE's Weatherization Assistance Program to 240,000.

During FY 1979, the Department identified a variety of difficulties with this program at the Federal, State and local level that were slowing the allocation and expenditure of funds. As a result, an Interagency Action Plan was developed by DOE, the Labor Department and the Community Services Administration to accelerate the actual weatherization of homes. Most recently, the Weatherization Assistant Program has been placed temporarily under the direction of the Secretary's Special Projects Office to ensure priority attention to its objectives within the Department.

By permitting wider use of direct hires and local contractors when CETA labor is not available, and by improving program management at the Federal, State, and local levels, we expect to significantly increase the number of homes weatherized each month. We would expect that by the end of March, 1980, States will have established specific production goals for the remainder of the fiscal year.

EMERGENCY ENERGY CONSERVATION ACT

The FY 1981 budget provides $4.1 million to continue support for DOE's responsibilities under Title II of the Emergency Energy Conservation ACt. A supplemental request is pending for FY 1980. These funds will be used for program administration, development and maintenance of the data bases essential for rapid and equitable implementation of these authorities, technical assistance and the monitoring of state performance. For example, state targets must be developed for various fuel types; gasoline, heating oil and electricity. To date, only gasoline targets have been developed. Assistance to States for the development of emergency plans will be made available under EMPA, discussed earlier.

SMALL SCALE TECHNOLOGY

The final program area under the direct responsibility of the Deputy Assistant Secretary for State and Local Assistance Programs is the Appropriate Technology Small Grants and Inventors programs. The FY 1981 budget provides a total of $20.6 million for these programs.

The $14.8 million budget for the Appropriate Technology Small Grants Program is an increase of $2.2 million over the FY 1980 level. This program, established by P.L. 95-39 has provided over 600 grants of less than $50,000 each since its inception. The program is specifically designed to provide assistance to those individuals and small businesses which do not normally have access to Federal financial assistance. Funding is for research and demonstration of small scale technology projects promising to conserve nonrenewable fuels and to encourage the use of renewable energy sources such as solar, wind, water and biomass. In FY 1979 the program was instituted nationwide and over 13,000 proposals were received. An example of the projects funded which have potentially significant nationwide benefits is an $11,000 grant to the University of Arizona to conduct workshops on how to build and install low cost solar hot water heaters. As of December 1979, over 1500 solar water heaters had been installed at a total cost to participating homeowners of less than $500 for each system. The increased funding for FY 1981 will be used to make 125 more grants and support efforts to encourage the more widespread application of small scale renewable technologies.

The Inventors Program established by P.L. 93-577, evaluates and provides assistance for promising energy related inventions. Using the expertise of the National Bureau of Standards, the program, since its inception, has evaluated over 12,000 inventions and the DOE has provided support for 60 of the inventions recommended. During FY 1981, the office plans to provide $2.4 million to NBS to support their efforts and to allocate $3.4 million to support an additional 40 grants for the development of recommended inventions.

ENERGY IMPACT ASSISTANCE

The FY 1981 budget provides $150 million in energy impact assistance for communities adversely affected by increased energy development activity. This is an increase of $100 million over the FY 1980 level to support a broader program which would be established by pending legislation.

The initial Energy Impact Assistance program, which was authorized under Section 601 of the Powerplant and Industrial Fuel Use Act, provided for a two year program, FY 1979 and FY 1980.

That program provided for technical assistance and financial assistance to States, regions and local governments for the implementation of programs directed at mitigating the adverse socio-economic impacts resulting from the development of new coal and uranium supplies. Under the program, planning grants were made available to all areas found to be eligible for assistance by DOE. Those funds were made available without a matching funds requirement. Grants were also made available for land acquisition and site development costs for housing and public facilities in eligible areas which have met certain planning requirements specified by the Farmers Home Administration. The maximum grant may not exceed 75 percent of the cost.

Under the 601 program, 86 areas in 23 States have been approved by DOE as being eligible for assistance. The program was and continues to be operated as a joint effort between DOE and the Department of Agriculture (DOA), Farmers Home Administration (FmHA). DOE accepts requests from States to approve designation of impacted areas and, when approved, transfers funds to DOA to be used at the local level for site acquisition and planning. Joint regulations were developed and made final in FY 1979.

Under the proposed legislation, the definitions of energy related impacts would be broadened. Pending legislation, S. 1699, would provide for grants, loans and loan guarantees. The Administration prefers a proposal under which DOE would provide "seed money" to the States and each State would develop a revolving fund to provide for impact assistance within their boundaries. Under either proposal, the request of $150 million for FY 1981 would be necessary.

In conclusion, I believe the full funding of the programs outlined in this statement will contribute significantly to our mutual objective of furthering energy conservation and the transition to renewable energy sources. I would be happy to respond to any questions.

Mr. **Dingell**. Mr. Stelson, the committee thanks you very much for the helpful testimony. The Chair recognizes my good friend and colleague from California, Mr. Moorhead.

Mr. **Moorhead**. Thank you very much for getting up early on a Monday morning and coming down here to testify before us.

What has the DOE projected as the additional cost per square foot to an average new home due to the BEPS regulation?

Mr. **Stelson**. The official estimate is about a dollar a square foot.

Mr. **Moorhead**. Does this include all of the costs to the building that would be additional?

Mr. **Stelson**. Yes.

Mr. **Moorhead**. Has the DOE projected the cost of implementing BEPS on the local and State housing officials, and the cost they will have to bear?

Mr. **Stelson**. Congressman, I would like to refer that question to Mr. Millhone here; he is the Director of the program on Buildings and Community Services and is much more familiar with the details of BEPS than I am.

Mr. **Moorhead**. That is fine.

Mr. **Millhone**. Mr. Chairman, Mr. Congressman, the estimates of the cost of implementation on the local officials will vary considerably, depending on the implementation strategy that is taken. If we rely primarily on the use of local code officials, which would require that there be code programs in areas that sometimes do not now have them, that approach would be fairly expensive.

There is also an alternate approval process which we are considering, which would not require the development of a code infrastructure in all areas where the standards would apply. That would be a good deal less expensive.

We do not have dollar estimates of these amounts at this time. We do have indications that the net present value would be positive; that is, the energy savings would save far more than the cost of implementation.

Mr. **Moorhead**. To the individual homeowner?

Mr. **Millhone**. This would be true for all individual homeowners except for the possibility of low-income homeowners, and there we are looking at different possible incentives that would make it positive for them as well.

Mr. **Moorhead**. You have, of course, as you suggested in your answer, situations in different parts of the country, but surely areas like southern California, Florida, Texas, Arizona—they don't have anywhere near the same kind of problems that you have up in the cold areas of the Northeast, and to impose the same type of standards on them——

Mr. **Millhone**. Mr. Chairman, Mr. Congressman, I might say one of the provisions in the legislation provides that if there is a part of a State where the cost benefit of the application of BEPS is not positive—that is, where the level of construction is so small that it doesn't justify having the application of the BEPS programs there—then that area can make a request through the Governor to the Secretary of the Department of Energy for an exemption from the BEPS program.

Mr. Moorhead. I guess one of the things we might be concerned about is who makes that determination about whether something is cost effective or not?

Mr. Millhone. The determination on whether the cost benefit is positive in an area that seeks an exemption is by the Secretary of the Department of Energy.

I might mention that in California there currently is a statewide building code, I believe, so that your State would be affected by the application of BEPS far less than many other States.

Mr. Moorhead. Aren't these really decisions that have never really been made on a Federal level before, and which might place a burden on the Secretary of Energy that he wouldn't be able to carry out accurately?

Mr. Millhone. Mr. Chairman, Congressman, under the current State energy conservation program, there is a mandatory requirement on all States that they undertake energy conservation codes in their buildings if they are to qualify for the receipt of the State energy conservation program funds; so this is not a new requirement that the Federal Government has indicated a preference for applying to the States.

What is new about this is the use of the performance approach, which allows for greater flexibility in the design of buildings and provides an encouragement to innovative structures and the use of solar energy and focuses attention, as I think it should be, on the full performance of buildings rather than design of certain components.

Mr. Moorhead. You know, I know a lot of the homes out in our State, but in many of the States of the Union, they don't really get a professional architect or engineer to design the building. Oftentimes, they will buy a set of plans that come from a newspaper or magazine, or get them in some other way, so they avoid the very large engineering and architectural cost when they build their home.

Have you estimated the cost of retaining these architects and engineers, or even perhaps having to have a contractor, where they were used to building their own, in order to comply with the BEPS standards?

Mr. Millhone. Mr. Chairman, Congressman, the current notice of proposed rulemaking deals with the standards; that is, the energy budgets themselves. We are currently working on proposed rules of implementation. In that rulemaking it will be much clearer that there will be alternate methods of complying with the BEPS requirements. We have a good deal of work that is underway to deal with that problem which you have identified; that is, making it as easy as possible for small home builders to comply with the requirements of BEPS.

In this effort we are working to come up with some method of revising the HUD minimum property standards so they could be the equivalent to the BEPS standards. We are also working with the American Society for Heating, Refrigerating and Air-Conditioning Engineers so that its standard can be revised to be the equivalent of BEPS. This is the standard most commonly in use in the States, so that it can be a method for complying with the BEPS standards.

Mr. **Moorhead.** I understand that only one part of the regulations have come out so far. When do you intend to come out with the rest of them?

Mr. **Millhone.** The proposed rules for implementation will be published in August of this year, along with the final standards.

Mr. **Moorhead.** How long will there be for comments after that?

Mr. **Millhone.** We anticipate a 6-month period between the publication of the proposed rules on implementation and the final rules on implementation.

Mr. **Moorhead.** Does the DOE intend to request congressional approval of Federal financial sanctions against communities which do not accept BEPS as part of their own code?

Mr. **Millhone.** The Department is currently considering different methods of implementing the proposed standards with the provision of sanctions that is spelled out in the legislation as one of those methods.

No decision on whether to make that request has been made.

Mr. **Moorhead.** I guess one of the things that concerns me more about something like this, is that especially where you get tremendous differences between States and their problems, and some of them have problems with too much heat in the summer, and others with problems of too little in the winter, and so forth, they probably understand their own problems better than someone in the Department of Energy.

They are all concerned with the same thing, saving energy. Believe me, the States want to save energy as badly as you do, but when you start imposing standards on them, many times your standards may be less efficient than their own, and you may do more harm than good. I guess that is what I am concerned about.

I don't want to see the harm that comes from the bureaucracy in costing us energy that otherwise could be saved and people who know what they are doing on the spot in the climate they are in.

Mr. **Millhone.** Mr. Chairman, Congressman, there are many of us within DOE who share that kind of concern. Many who are working on the program have had experience at State or local governmental areas or in private building practices. I know personally. I was in Minnesota when that State became the first State to implement an energy conservation code on new construction. I was director of that State's energy agency, and there was a strong recognition that despite the market incentive and the cold weather incentive in that State, the design of buildings wasn't responding as quickly as would be desirable for the optimal savings of energy and dollars to the new homeowner.

So, as a result, although there was some opposition initially, there were many builders afterwards who felt as if the use of the energy code in that area had led to significant energy savings and better buildings on the part of the people who were buying what they were producing.

Mr. **Moorhead.** My time has expired, so I want to thank you again.

Mr. **Dingell.** The Chair thanks the gentleman.

The Chair recognizes the gentleman from Michigan, Mr. Stockman.

Mr. **Stockman.** I have no questions at this time, Mr. Chairman.

Mr. DINGELL. The Chair recognizes staff, then, for questions.

Mr. ATHY. How many positions are now vacant under the Conservation and Solar Division?

Mr. STELSON. Of the positions here in headquarters in about the middle of January there were 84 vacant.

Mr. ATHY. Is that a result of a job freeze by OMB, or what is the reason for those vacancies?

Mr. STELSON. I am not completely familiar with the history, but I think there were a number of factors involved. It has been steadily declining, and we have processed the filling of 15 of those 84 since the middle of January, but it is a major interest and concern of mine to see that those vacancies do not remain vacant.

Mr. ATHY. Last year, your predecessor said in response to the same question, about the same answer, "I have given instructions to all my middle management people to proceed with the recruiting and filling of these positions as rapidly as possible. I assure you there is no higher priority on the administrative side."

Despite this commitment the problem persists. Can you further explain that, beyond your last response?

Mr. STELSON. There are a number of reasons, and many of them stem from an historic condition where DOE was formed by elements of various governmental groups and they were not on a common personnel basis.

Since I first became aware of this problem in the fall, those difficulties are being met with, I think, relatively great speed.

But let me say this: In addition to these bureaucratic problems, there is a fundamental problem, and that is that the Nation has a great shortage of people who are knowledgeable about conservation and solar energy. It is not an established discipline, and so we systematically lose people all the time. In fact, I think in the last year about 15 percent of the personnel was lost; so you not only have to recruit to fill vacancies that currently exist, you have to recruit to fill new vacancies as well.

Mr. DINGELL. Of course, Mr. Stelson, the question that bothers us, you know, is, are you being inhibited by policies? Are you being inhibited by the Office of Management and Budget? Has there been a budgetary freeze imposed upon you?

Mr. STELSON. There has been no budgetary freeze.

Mr. DINGELL. No budgetary freeze at all, at any levels?

Mr. STELSON. Right now, no.

Mr. DINGELL. Right now. Has there, during the past year, since your predecessor was before the committee?

Mr. STELSON. Let me refer to somebody who would know more about that. Dr. Savitz?

Ms. SAVITZ. There was an overall government freeze last year on any hirings. That got lifted sometime in March of last year.

Mr. DINGELL. Does that prevent you from filling any positions in this area of solar and conservation?

Ms. SAVITZ. I think from October through March it prevented us from doing any kind of hiring.

Mr. DINGELL. October of what year?

Ms. SAVITZ. 1978 to March of 1979.

Mr. DINGELL. So, since that time, have there been any policies emanating from the Office of Management and Budget, or from the

Office of the Secretary, which have precluded you from filling the positions in these parts of your agency?

Ms. SAVITZ. The Office of Management and Budget has not put any types of freezes or constraints on it. It requires time; not having had an organization approved until June, and then having to classify all of the jobs, as Dr. Stelson mentioned, of those people who had come from predecessor agencies. We didn't have an official organization until last year.

Mr. DINGELL. You are referring to the changeover from ERDA?

Ms. SAVITZ. ERDA and FEA into the department. The first approved conservation and solar organization was not until June of 1979, though the department was formed in October of 1977.

Mr. DINGELL. I am aware of that. When were the personnel systems to have been merged?

Ms. SAVITZ. They were all merged when the department was formed, but they couldn't do the actual reclassifying of all the jobs until an organization was approved. It is like a circle.

Mr. DINGELL. I don't intend to belabor the point. It does seem, though, that DOE was formed 3 years ago, and it does seem the shakedown period should be at an end. The committee is interested in knowing and finding out where the problems lie, so they can be corrected.

Last year, the indications were the jobs were going to be filled and these programs were going to be moving forward expeditiously. Today, we gather the jobs are not filled; there have been ancient problems.

Now, do those problems remain alive today, and do they still inhibit you in moving forward?

Mr. STELSON. There are some problems remaining. For example, in our downgraded personnel in DOE, and to the best of my knowledge there are about 80 positions, and under the regulations in civil service there are rather cumbersome procedures for handling that kind of problem.

Mr. DINGELL. And you have, at the same time, these vacancies which must be filled. The question is, what is it that is holding up the filling of these positions?

Mr. STELSON. Let me say this, Mr. Chairman: To the best of my knowledge, at this time there is no fundamental block.

Mr. DINGELL. No fundamental block?

Mr. STELSON. That is right, and we are proceeding, and, as I told you, since the middle of January we have hired another 15 to 20; the 84——

Mr. DINGELL. Out of how many vacancies?

Mr. STELSON. Eighty-four.

Mr. DINGELL. That means in approximately 5 years, if everything goes well, you will have completed the filling of your vacancies.

Mr. STELSON. As best as I can determine, as a novice in this process, it takes approximately 22 weeks to hire somebody.

Mr. DINGELL. Well, you don't hire one person at a time. I assume that you hire numbers of people. Am I correct?

Mr. STELSON. That is right.

Ms. SAVITZ. The administration has made a commitment to provide the support necessary to have our vacancies filled by the end of March.

Mr. DINGELL. By the end of March? How many applications do you have under consideration?

Ms. SAVITZ. There are 84 vacancies which are in various stages; either being posted, where we advertise the jobs, or where selections have to be made. The position descriptions have been written for them, and it is a matter of going through the process——

Mr. DINGELL. You are anticipating this will be done by the end of March this year, the jobs will have been filled?

Ms. SAVITZ. That is the indication we have gotten from our administrative officers, that they would give us the support to enable that to happen.

Mr. DINGELL. I only want to express a dissatisfaction at the fashion in which these matters have gone forward, and I am going to instruct staff at this time to inquire further into this matter.

Mr. ATHY?

Mr. Athy. How many personnel do you have assigned to the BEPS program now, Dr. Stelson?

Ms. SAVITZ. Six.

Mr. ATHY. How many dollars are spent on contracts?

Ms. SAVITZ. On BEPS, about $8 million.

Mr. ATHY. How can these few individuals do a proper analysis of all that technical work?

Ms. SAVITZ. We are in the process of hiring three more people we have just gotten approval for, which will give us nine. And six have been involved with the program for a long time and do work closely with it. In addition there are other people within the Department who are involved, not just those six. For example, under Mr. Millhone, a couple people who are engineers, who are involved with ventilation, infiltration, and computer programs, spend parttime working on BEPS, and one of those individuals is analyzing the evaluation techniques.

We have gotten good support from policy and general counsel. So it is a matrix.

Mr. ATHY. You are looking for additional people now?

Ms. SAVITZ. We are looking for three additional people.

Mr. ATHY. However, the program is moving forward in the absence of the necessary commitment?

Ms. SAVITZ. That is right.

Mr. ATHY. How many people work under contract?

Ms. SAVITZ. We probably have 50 different contracts that have many different people working on them. John might be able to give more detail.

Mr. MILLHONE. Although the number changes from time to time, the estimate is about 100 people working on BEPS under one of the contracts or another. This includes people who are with private corporations and also a good number of people who are at the DOE laboratories.

Mr. ATHY. Are you saying in some tangential way there are 100 people involved; is that what you are saying?

Mr. MILLHONE. I wouldn't say tangential; I would say full-time equivalent positions working on the BEPS program.

Mr. ATHY. On page 18 of your supporting statement, Dr. Stelson, you list the accomplishments and objectives of FEMP as one: "A consumer motivation demonstration was held in three United

States and two Canadian cities where energy cost indicators, energy usage display meters, were installed to determine their impact on energy use," and two: "During fiscal year 1980, DOE is developing the Federal 10-year building energy conservation plan. The goal of the plan is a 20-percent reduction in energy use per square foot in existing buildings and a 45 percent reduction in new buildings."

Those are the only accomplishments listed in your testimony. For a number of reasons it has become apparent that the federal energy management plan is not working. For the years 1976, 1977, 1978, the Federal Government energy use was virtually the same.

What do your figures show for 1979? You can supply it for the record, if you don't have it.

Mr. DINGELL. It will be inserted in the record at this point.

[The following information was received for the record:]

FEDERAL ENERGY MANAGEMENT PROGRAM (FEMP) DATA

The Department of Energy does not have available to it energy conservation expenditures for Federal agencies. However, OMB has provided building retrofit dollars for the six largest agencies in terms of building energy consumption. The building retrofit budget for these six agencies (DOD, DOE, Postal Service, GSA, VA and NASA) in 1979 was $211 million.

Energy consumption in all Federal buildings in fiscal year 1979 was 148.7 million barrells of oil equivalent (MBOE). Consumption in non-building operations was 146.1 MBOE during the same period, for total Federal use during fiscal year 1979 of 294.8 MBOE. Compared to the fiscal year 1975 base period established in Executive Order 12003, consumption in fiscal year 1979 represents a reduction of 6.4 MBOE (4.1 percent) in buildings and 9.4 MBOE (6.0 percent) in general operations, for total savings of 15.8 MBOE (5.1 percent).

Mr. ATHY. As you know, on January 11, the President announced by the end of 1981, 10 percent of unleaded fuel would be gasohol. This target will require domestic production capability of at least 500 million gallons of ethanol during 1981. To accomplish this goal will require a significant organizational feat within the Government to coordinate the various agencies that have programs necessary to meet this goal.

Subcommittee review has found that the current organization structure is inadequate and in disarray. Isn't it true that DOE has, for over 1 year, attempted to transfer $12 million in small and medium-sized facilities research and development funds to Agriculture, without success?

Let me ask you whether that is true, and, second of all, why it is necessary to transfer it to Agriculture, and how they are equipped, where DOE is not prepared?

Mr. STELSON. With your permission, I would like to ask Dr. Sanmartin to comment on your question. Dr. Sanmartin is the designated Deputy Assistant Secretary for Field Operations and International Activities.

Mr. ATHY. Before he responds, I have here an organizational setup for the Conservation and Solar Energy Office, and the Office of Alcohol Fuels is found somewhere down at the bottom here under the Deputy Assistant Secretary for Solar Energy, who will report to you as the Assistant Secretary who reports to others before the matter is ever reported to the Secretary.

Let me ask you before he responds, whether that is a direct emphasis for the kind of program the President is talking about?

Mr. Stelson. Yes, it is a primary office and a major element in the programing of the solar energy programs in renewable energy resources. And it happens to be an area in which I have worked a great deal myself, and I would just say that in the various elements of the program, the $200 million in feasibility studies and in the $2.2 billion of programs to help assist construction, alcohol fuels would be a major part of those activities.

One other comment: There is also in the supplemental budget significant funds and personnel directed toward alcohol fuels.

Mr. Sanmartin. I am Robert Sanmartin, and previous to my current assignment, I had been Director of the Division of Distributive Solar Technology, which had as one of the elements, reporting to my office biomass energy systems.

Mr. Athy. So you are not in the Office of Alcohol Fuels?

Mr. Sanmartin. That is correct.

Mr. Athy. Nor does the Office of Alcohol Fuels report to you?

Mr. Sanmartin. That is correct, but I do have historical knowledge, having been intimately involved in the negotiations with the Department of Agriculture, and also a number of the planning options that the Department considered with regard to alcohol fuels, and I would be happy to respond to your questions.

Mr. Athy. Thank you.

Mr. Sanmartin. Specifically relating to the interactions with the Department of Agriculture, we began a process in August of last year to plan as part of our philosphy of decentralized management of these programs to transfer to the Department of Agriculture approximately 20 percent of the biomass program for management. The portions of that program are to include the production of species that can be used in biomass and, in addition, the development of small-scaled on-farm energy systems.

A portion of that does directly impact small-sized alcohol-producing units. In that particular process we set a target of approximately $12 million for transfer to USDA to manage in the field for the Department of Energy, and those areas seem to fit naturally and very well into traditional activities which the Department of Agriculture has been involved in.

In that regard, we have agreed upon what is called a programmatic memorandum of understanding which generally sets up the program areas that we are to operate within on a joint basis, and we are in the very final stages of signing off on an interagency agreement which will formally transfer the dollars from one agency to the other.

In the interim, the Department of Agriculture has been drafting its plans as to how it would carry out the work in these areas so that as soon as they receive the dollars, they can proceed immediately to implementing the program portions for which they are assuming responsibility. Therefore, I would expect that this formal transfer would be completely signed and in place within just a couple of weeks at the very most.

Mr. Athy. Who made the decision that the Department of Agriculture was better qualified to pursue this program?

Mr. Sanmartin. That was a joint decision within the administration and also involved some interaction with the Office of Management and Budget.

Mr. ATHY. And hence, documents would be available within the department regarding to that decision?

Mr. SANMARTIN. To the best of my knowledge, there were a number of discussions that took place. I don't know whether there are formal records that exist that can be referred to, but in the actions that the Department has taken in the past in decentralizing the management of many of its major elements, this is a very typical type procedure that we have followed in the past, and have found to be very fruitful, and have increased the efficiency of actually deploying the programs that we are charged to carry out.

Mr. DINGELL. Did you say that it was the policy of the Department of Energy to transfer its functions and decentralize them?

Mr. SANMARTIN. Mr. Chairman, there has been strong movement within the Department to decentralize the field management of many of its program elements. That does not transfer the functions out of the Department. That puts the day-to-day project management of individual contracts and ongoing projects in the hands of people, some of them outside of the Department of Energy, but the overall program and functional responsibility for this does rest within the Department of Energy.

These elements are not independent entities. They instead report to the headquarters' individuals in the Department of Energy. In essence, a contract is reached between the Department of Energy and this field entity as to what is to be accomplished over a period of time, what are the deliverables to be had and on what schedule they are to be accomplished, and the Department of Energy then oversees this operation.

Mr. DINGELL. I have curiosity. How are we to say the Department of Agriculture has either the same mission or purposes or talents or skills to carry out functions that are delegated to the Department of Energy by the Congress as a part of the Nation's energy program?

Mr. SANMARTIN. Mr. Chairman, in the particular items that we are discussing with the Department of Energy right now, about half of the effort that we are speaking of has to do with producing biomass; that is, growing trees, growing specific species of plants that can have a direct energy impact. I believe this is an area where the Department of Energy does have a long-term demonstrated expertise in——

Mr. DINGELL. The Department of Agriculture, you mean?

Mr. SANMARTIN. The Department of Agriculture. I am sorry.

Mr. DINGELL. It would be appreciated if you would cooperate with the staff, and we would like to pursue this matter a little further, and there will be some additional questions.

Mr. SANMARTIN. Certainly.

Mr. DINGELL. What was the initial decision with regard to the transfer—in favor of, or opposed?

Mr. SANMARTIN. In favor of.

Mr. DINGELL. Were you initially in favor of the decision with regard to the Office of Management and Budget?

Mr. SANMARTIN. We are in favor of that.

Mr. DINGELL. I am not requesting what you are doing now, but prior to the time when this program first was floated, was the Department of Energy in favor of it at that time or opposed to it?

Mr. **Sanmartin.** In favor, Mr. Chairman.

Mr. **Dingell.** Very well.

Mr. **Athy.** Dr. Stelson, with respect to the Office of Commercialization, which we discussed at similar hearings last year, what is the current status of that Office, and what are its accomplishments?

Mr. **Stelson.** It is a very active Office and in the reorganization let me say that most of the personnel will be collocated with the program areas that are under commercialization development, so that it is a matrix-type organization or interacting system.

The marketing and commercialization of both conservation and renewable resources is a big concern and big effort, and in the reorganization the research and development and the commercialization have been integrated under each Office so that there is no confusion or separation of responsibility. For each technology there will be a commercialization responsibility with a collocated person from the Office of Commercialization. In other words, the Office itself would be a small central staff of experts, but the bulk of the personnel would be located in the program areas and intimately involved in the programs.

Mr. **Athy.** Would you provide for the record a list of the accomplishments of that Office?

Mr. **Stelson.** Yes.

[The following information was received for the record:]

SUMMARY OF THE ACCOMPLISHMENTS OF THE OFFICE OF COMMERCIALIZATION

The Office of Commercialization was created in 1979 and much of its initial efforts have been directed to organizing the office and hiring staff. Currently, Resource Managers for Cogeneration, High Efficiency Motors, Wind Energy, Active Solar, and Electric/Hybrid Vehicles have been appointed in permanent or acting capacities. Additional resource managers and a staff of three market planning specialists are in the process of being hired.

Commercialization strategies for each of the five technologies mentioned above are being developed in conjunction with the relevant CS program offices. These strategies will become an integral part of the program offices' multi-year and annual plans and will provide the market-oriented focal point for research, development, and demonstration activities.

Specific accomplishments of the office with respect to the five technologies for which resource managers have been appointed are described in the attachments. In addition to these accomplishments, the Office of Commercialization played a major role in conceiving, designing, and conducting the Low Cost/No Cost Residential Energy Saver Program in New England last November. This program was developed to motivate consumers to take 11 inexpensive actions that can save up to 25 percent of their residential energy consumption.

ACTIVE SOLAR SYSTEMS

- Promoted through the Northeast Solar Energy Center (NESEC) the doubling of solar water heaters (SWH) in the northeast (from 5,000 to 10,000 units) in calendar year 1979.
- Supported TVA in the market planning and continued support in the implementation of the Nashville 10,000 SWH program; 10,000 SWH systems to be installed over 3 years, beginning in late spring 1980.
- Fostered the California PUC's decision to actively involve their four major private utilities (PG&E, San Diego Gas and Electric, Southern California Gas, and Southern California Edison) in the promotion and financing of SWH systems. Implementation plans to introduce 175,000 units in 3 years are now being prepared.
- Actively participated with Southern Solar Energy Center (SSEC) in the planning and implementation of an aggressive advertising campaign for SWHs in the tri-county area of Miami. Campaign relied on PSAs, television and radio, public service billboards, newspaper articles, etc. Follow-up campaign in the spring of 1980 will include paid advertising buys.

WIND ENERGY CONVERSION SYSTEMS

- Working to broker with several wind turbine manufacturers and a number of utilities for the installation of wind energy farms at the system verification level (15-25 units) at totally private cost.
- Evaluated and identified utilities in regions of the country that appear to be the best targets for possible interest in participating in such a wind farm project.
- Have succeeded in bringing Westinghouse Electric Corporation and a midwestern electric power cooperative to an agreement in principle to install a 20-25 unit wind farm using 500 KW wind turbines. Assuming these agreements will be finalized as anticipated, this is a highly significant commercialization event in that it potentially represents the first multi-unit deployment of utility-size wind machines in a utility grid, a commitment by a major utility supplier to begin pilot-scale production of utility-size wind machines, and the use of all private capital.

COGENERATION

- Completed and distributed report, "Guidelines for Developing State Cogeneration Policies."
- Conducted 3-day training seminar for regional staff.
- North Carolina cogeneration assessment completed and conference held.
- Procurement for grant to Texas accomplished, State plan under development, Texas handbook developed, State conference held.
- Workshop with California Energy Commission and PUC held.
- Grant awarded to California for State cogeneration implementation plan.
- Grant awarded to City of Tacoma for cogeneration project implementation plant.
- Manual and computer program for identifying large energy users and potential cogenerators using national emissions data survey and State boiler registries nearing completion.
- Grant awarded to New York and generic studies underway leading to demonstration projects.
- Work with California has led to rate and regulatory innovations.
- Provided input and review to development of PURPA cogeneration rules and fuel use policy.

ELECTRIC AND HYBRID VEHICLES

- o Including electric vehicles in Corporate Average Fuel Economy (CAFE) calculations.

  The Resource Manager for Electric and Hybrid Vehicles provided technical assistance and consultation with industry and Congressional staff at their request. DOE supported this legislation as a way of removing a regulatory barrier to electric vehicle commercialization. The new law allows manufacturers to get credit for electric vehicle petroleum savings in calculating their "CAFE" should they choose to produce electric vehicles. Formerly, there was no way of including electric vehicles since no liquid fuel was consumed by them (i.e., no "miles-per-gallon").

- o Opportunity and Risk Assessment (OPRA) for Electric and Hybrid Vehicles

  A cooperative assessment of the entire National effort in electric and hybrid vehicles was initiated jointly with the Electric Power Research Institute and through Purdue University. The results of this study (December 1980) are expected to be a major piece of guidance to DOE management and its Electric and Hybrid Vehicle program, as well as to other major actors in electric and hybrid vehicle commercialization (e.g., the electric utilities).

HIGH EFFICIENCY MOTORS

- o Established an Interagency Agreement with the U.S. Army Mobility and Equipment Research and Development electrical power labs to provide support testing on commercially available electric motor concepts.

- o Provided input for promotional articles and information on Electric Efficient Motors to the following trade journals and periodicals:

  - Design News
  - Purchasing World
  - Spectra (IEEE)
  - Energy User News
  - Energy Management

- o Coordinated and identified High Efficiency Motor demonstration installations and opportunities in Government facilities (e.g., Post Offices, Department of Defense (Showcase) facilities, and the Naval Facilities Command.

- o Established an Interagency Agreement with NASA for testing a NASA motor efficiency device to determine commercial feasibility.

- o Assisted in and coordinated the formulation of informal motor efficiency procurement specifications with some procurement offices in GSA and DOD.

- o Arranged for vendor-sponsored introductory demonstrations of commercial applications for motor conservation concepts to responsible Government officials (e.g., EXXON's microprocessor alternating current synthesizer and Borg-Warner's microprocessor alternating current inverter.

Mr. **Athy.** With respect to the weatherization program, why has the low-income weatherization program failed to reach multiunit housing? It is my understanding that the problem has been the certification that everybody in the unit housing is low-income and you are making progress on that?

In addition, on the same budget, how much money is unspent with the States and local agencies? I ask that question, hoping it will be supplied for the record in response to the chairman's formal questions, but in any case would you comment on that?

Mr. **Stelson.** I would like to have Mr. LaGrone comment on it. As you may know, the weatherization program is a program of special emphasis in the administration and the Department of Energy, and this Special Project Office is headed by Mr. LaGrone.

Mr. **LaGrone.** Thank you, Mr. Stelson.

I am Joe LaGrone, Director of the Special Projects Office that was established by the Secretary about 5 weeks ago.

The specific purpose of this weatherization project office is to speed up production, to determine what regulatory changes need to be made, what activities need to be undertaken to strengthen program management.

On the question of multiunit dwellings, there has been a historical problem, as I have read the record, in getting multifamily units and rental units weatherized. In part, it stems from the requirement to insure the benefits of weatherization flow to the low income family, or the tenants.

Second, obtaining assurances that the rents will not be raised. Third, a requirement that there will not be undue or excessive enhancement of the value of the property.

Some of the State and program operators have indicated reluctance to enter into agreements of this nature for fear of noncompliance. Likewise, we understand that landlords have been reticent to enter into a contract or be contractually bound with the Government with respect to raising the rent.

Others have incorrectly interpreted the regulations to say if there were 3 people or 30 people in a multiunit building who were not low-income, that the rest of the building could not be weatherized because those other-than-low-income people would benefit from the weatherization. That is, I understand, the history.

We are moving on three fronts currently to try to address the problem. First, in the city of New York, we have initiated a grant with the city of New York to weatherize approximately 7,000 units. Under that program we hope to obtain experience in terms of what are the problems, what are the most cost-effective measures, and to transfer that data across the country to locations where there are multiunit dwellings.

Second, we are in the process of revising the regulations to cover a number of areas, one of which is to include a provision that if two-thirds of the occupants of a multiunit dwelling are low-income, then the entire building would qualify. We hope to stimulate an increase in that area.

Third, as recently as last week, in discussions with the Community Services Administration, the Department of Labor, and other Federal agencies who have involvement in the weatherization program, we agreed, as soon as this round of regulatory changes are made, to initiate a study to determine what are the impediments to weatherizing multiunit dwellings and from that to identify the program changes that could be made, and, second, to identify and recommend, if necessary, legislative changes to stimulate weatherizing multiunit dwellings—all in recognition that a high percentage of low-income people in this country do in fact live in multifamily dwellings.

Mr. ATHY. My last question is: How much is lying unspent with regard to State and local agencies?

Mr. LAGRONE. Through fiscal year 1979, approximately $288 million have been obligated. Expenditures through the month of December 1979 were about $96 million. That leaves a sizable balance—I believe around $192 million—unexpended.

Fiscal year 1980 money we have not obligated, deliberately. So at this point, as a part of our Project Office's effort, what we are doing is obtaining from the States what are their needs in terms of prior-year unexpended funds, coupled with estimated amounts from the 1980 obligations to meet specific production quotas so that we don't end up in a case where there are huge sums of money not working and being used for weatherizing homes.

Mr. DINGELL. The Chair has some questions that I would like to ask. I note that the Federal energy management program goes from $400,000 up to $2.7 million. That is a net increase of $2.3 million. What are the plans for spending this money?

Mr. MILLHONE. The principal activities will include developing a more specific and useful data base on the energy consumed by all the facilities within all the departments and agencies within the Federal Government so that we have a better basis for determining the changes and improvements in energy consumption.

Funds will also be used to evaluate the plans that are developed by other Departments so that we can provide more specific recommendations for changes that they can make to improve their energy performance.

Funds would also be used to monitor the performance of other Departments more closely so that we will be able to better determine the improvements that are taking place.

Initial activity would also include technical assistance in support to other Departments to indicate what changes can be made.

And the fifth area will be to take the information that is learned from the Federal sector and provide seminars, training programs, workshops, for State and private groups to let them know what we in the Federal sector have learned in terms of how we can increase energy conservation programs.

Mr. DINGELL. How much of this will be contracted and how much of this work will be done in-house?

Mr. MILLHONE. The $2.7 million is all for contract work. That doesn't include the personnel within the program.

Mr. DINGELL. All contract work?

Mr. MILLHONE. Mr. Chairman, yes; the $2.7 million is for contract work.

Mr. DINGELL. Who will be the contractors and what will they do? I thought this was a governmental program.

Ms. SAVITZ. I would like to add, in addition to the $2.7 million for contract, there will be 17 people within the program to analyze work.

Mr. DINGELL. Your program at this minute is $400,000. That means that you are going to have a budget of approximately $400,000, if I am correct, for work in-house and $2.3 million is going to be contract work.

It may be that there is good justification for some major portion of that or perhaps even all of it to be contracted. What I am trying to figure out is: Isn't this a function that DOE is going to have to do over a long period of time? Isn't it a clear governmental function, and what are the justifications for this matter being contracted out in its entirety?

What you are telling me is the entirety of the new budget is going to be contracted out. Why?

Mr. MILLHONE. Mr. Chairman, I should make it clear that the total amount of Government money that is being spent on the FEMP program isn't included in that $2.7 million budget item.

Mr. DINGELL. It is not?

Mr. MILLHONE. No. That is only the contract funds for the FEMP program. The other costs, the headquarters cost of the FEMP program, shows up in another budget category and I believe that is program direction.

Now, in answer to your question of who will be performing the contract work, we will be producing requests for proposals and those contracts will be awarded competitively.

Mr. DINGELL. I thought that, but I am still curious why this is being done on a contract basis as opposed to being done in-house.

Mr. MILLHONE. Mr. Chairman, it will be done through in-house efforts and for that we have obtained an increase in personnel for the FEMP program. This enlarged in-house staff will make use of contracts in order to accomplish the goal.

Mr. DINGELL. You are indicating to me, I guess, that you have a $2.3 million increase for contract work. It may be that is fully justified but, as of this minute, you cannot tell me whether this is work that should be done in-house or whether it should be done for contract.

You are telling me you are going to put requests for proposals, and I assume in your proposed contract that is a splendid idea, but you have not yet established what this is that you propose to achieve by these contracts or why you are doing it by contract as opposed to doing it in-house.

We set up DOE to do these things and I gather that we are setting up, aside from the military, perhaps the largest single contracting agency in Government.

Mr. MILLHONE. Mr. Chairman, the approach that is taken in a number of DOE programs is to use headquarters staff supported by a variety of contracts, some of them through the National Laboratories, some through private firms. That same approach is the one that is being followed to increase the effectiveness of the FEMP program.

The important consideration here is, I think, that we are getting the increase in personnel necesary to adequately manage this contract activity.

Mr. Dingell. I am going to yield to counsel here.

Mr. Athy. Just to follow up on the chairman's question, which of the requirements of the FEMP are these contracts designed to accomplish?

Mr. Millhone. Mr. Athy, I covered those briefly earlier in terms of the development of the data base.

Mr. Athy. The data base for which requirement?

Mr. Millhone. In order to accomplish the objective of the FEMP program; that is, the 20 percent and the 45-percent increase in efficiency of existing and new buildings, it is necessary to have a reliable base of information that determines the current level of consumption. Although we get reports regularly from other Departments on the current base of consumption, there is the need to improve that data base so that that is part of the accomplishment of the energy-saving mission of the FEMP program.

Mr. Athy. You have already done some kind of development on the cost analysis for retrofitting Federal buildings; is that correct?

Mr. Millhone. Yes, we have already published.

Mr. Athy. Will these contracts relate to that at all?

Mr. Millhone. There is a little additional work on life cycle costs that might end up in an amendment to the current rules, but by and large we have completed the——

Mr. Athy. Would the contracts relate to the guidelines for the 10-year building conservation that were due in 1977 that are maybe at OMB now?

Mr. Millhone. Yes, the 10-year building plan, review of those plans and the determination of whether the DOE believes that they are adequate——

Mr. Athy. Those guidelines that were due on November 1 of 1977 are being revised, is that it? You are revising those guidelines? OMB asked for new guidelines. Is that what I understand you to be saying?

Mr. Millhone. We are getting both the revision of the 10-year building plan guidelines and also we are developing operating plan guidelines which cover energy consumption outside the building area.

Mr. Athy. Are you scrapping the present guidelines?

Mr. Millhone. No, we are revising and augmenting the present guidelines.

Ms. Savitz. There are several types of guidelines. We have published final building guidelines that will enable the agencies to submit their plans as to how they are going to make both the legislative and executive order goals for 1985 and 1990. Those plans will be submitted to us and will go into a Federal-wide 10-year plan.

We have out on the street now for comment a general operations guideline which would enable plans to be followed up that have to do with other than building, how they might do with their transportation and other operations.

A third thing that we are doing that OMB has been reviewing has been that specific 10-year plan and different things get fed into it.

Mr. Dingell. Last year in hearings before this subcommittee, Miss Walden, who is here, was inquired of as to what the status was of the 10-year plan and Miss Walden said, "The 10-year plan has been developed and is currently under review by the Department."

What is the current status? Is it now under review by OMB?

Ms. SAVITZ. It is at OMB, but it has also been recently reviewed within the Department by the Secretary's Office, which has made some comments. We are taking their comments into account as we revise that 10-year plan, but I do want to emphasize that certain things like the guidelines have been put out in final form.

Mr. DINGELL. The dates of these events were some time in the spring of last year, around the second of March, as a matter of fact, 1979, and again Miss Walden says, and I quote: "I would say they will be finalized within the next 60 days."

But now you tell me this plan is being reviewed by the Office of Management and Budget now?

Ms. SAVITZ. As I said, there are three separate things. One is building guidelines which were being reviewed last year, and which were published for comment in April and finalized this past summer, and then there are general operations guidelines that are now out for comment.

A third item is the specific 10-year building plan and that one has been at OMB and also is being revised based on some comments we have just gotten from the Secretary's Office. One of the things I think she referred to last year was general building rulemaking which did get out last April and was finalized during the summer. The 10-year plan has been slipped.

Mr. DINGELL. I hate to say it, but I detect what you are telling me is last year it was under review by the Department. This year it is under review by the Office of Management and Budget. What I am trying to figure out is, when is the plan going to begin to have some concrete benefit to the country in terms of being implemented, having the expenditures made, having incentives go out for compliance with the plan to the different agencies that might be involved?

Ms. SAVITZ. The agencies under separate categories have been submitting budgets and spending money on retrofit even without approved plans. They have been acting under this executive order for several years to reduce their energy use, so that hasn't held up.

Mr. DINGELL. I applaud that. That is a splendid idea, but the problem I have though is, you have apparently a plan. Last year it was being reviewed in the agency, in the Department. This year it is being reviewed in the Office of Management and Budget. In the interim, other agencies within the Government are going about spending money, but they are not complying with the plan and we are not achieving the benefits of a plan and so obviously, although the things you tell me are good, I kind of feel a little bit like I used to in the Army. We used to sing a song: "I am forever signing the payroll, but I am never getting a blankety-blank cent."

I sort of detect that the same situation exists here with regard to the 10-year plan.

Ms. SAVITZ. Even within the 10-year plan that we have been developing, it doesn't have the agency input. The building guidelines that we did put out last summer mandated that the agency develop plans. Those are due to us in May. So, even if this document that we were ready to put out could be put out now, the one currently at OMB has many missing parts such as the specific agency plans, and those will come to us in May.

I really think that a meaningful plan will not be developed until the summer when we actually get the agency plans in response to our building guidelines which came out last summer.

Mr. DINGELL. I deduct you are telling me this plan has been in formulation how long?

Ms. SAVITZ. Too long; several years. At least 2, I know.

Mr. DINGELL. How much longer before this plan is finally finished?

Ms. SAVITZ. As I said, based on comments we have just received and the fact that the agency plans in response to other guidelines are due in May, I don't think the plan will get finished until those plans come in and it will be this summer before we have a real meaningful 10-year specific plan.

Mr. DINGELL. I am not sure whether this plan has the name of a 10-year plan because it is taking 10 years to develop or because it is intended to go to work for 10 years.

I mean, this committee feels great urgency on this matter and I hope you folks down there do too.

Ms. SAVITZ. We do and I think we have made some progress in the past year of getting out the general guidelines so plans could be developed and they knew what were the directions.

But we have not done enough and we need to do more. That is part of the reason for increasing the staff and also being able to get increased funds, so we can get a good data base and continue to implement the mandated responsibility that we have in addition to the commitment on the administration that the Government should be a leader in the saving of energy.

Mr. DINGELL. This plan was developed under EPCA, which was passed in 1975. It is now 1980. That is 5 years since we passed EPCA, or 4½, and we have just got to move along on this matter or I think quite frankly disaster impends, and the problem we have got in the committee is not to castigate you for not moving, but to find out where your problem lies so we can get it cleaned up or have you analyze it so you can tell us when you come up here so you can start correcting these problems that I find very oppressive.

Mr. STELSON. Mr. Chairman, your comments are very much appreciated and I will personally check into it in detail. I share your concern.

Mr. DINGELL. Let me ask you what are you doing to deal with items at page 3 of your major statement?

In your major statement at page 3 you talk about local building codes and zoning restrictions that prevent or deter conservation-oriented improvements to buildings, rates for electricity that decline as the quantity used increases, and restrictions on sale of electricity from cogeneration plants. Those are matters that have been viewed by this subcommittee as being of greatest importance for a number of years.

Now, we don't have time enough to go into that in detail, but I would like you to submit to the committee the specifics as to what you are doing in each and every one of those areas, if you could. Without objection, the record will remain open to receive that.

[The following information was received for the record:]

RESTRICTIONS WHICH PREVENT OR DETER CONSERVATION IMPROVEMENTS

Restrictions on Building Codes

Certain building codes have restrictions such as roof weight limits which may prevent the installation of certain solar system. Elements of local zoning ordinances such as height restrictions and floor area ratios may result in inefficient surface to volume ratios; building exposures subject to excessive climatic conditions and limited or no access to solar gain.

DOE is analyzing all national model building codes to determine if there are any conflicts with the Building Energy Performance Standards (BEPS). New more stringent model standards and codes are under development. These will be used by builders, designers and code officials to deal with old problems in new ways.

Finally, a process to determine the equivalency between BEPS and a state code is being developed.

A part of that process will identify specific requirements in state codes which may impede the design of energy conservation potential.

Restrictions on sale of electricity from cogeneration plants

The widespread utilization of cogeneration and therefore realization of its benefits, is greatly impacted by the ability of cogenerators to sell and/or buy electricity from the utility grid. Since utilities are generally regulated by a State commission or local government body, any agreement between a cogenerator and a utility most likely will be subject to regulatory approval. Rules on the exchange of electricity is being implemented by the Federal Energy Regulatory Commission (FERC) as required by the Public Utilities Regulatory Policies Act (PURPA). These rules will apply to "qualifying" cogeneration but not necessarily all cogenerators. Our work is intended to address all the issues of cogeneration and have served as input to the FERC in development of regulations and guidelines.

The issue of the interface between a cogeneration facility and the electric utility grid has been addressed in two general areas by the Community Systems Program. In one of these, the Grid-Connected Integrated Community Energy System, site-specific applications have formulated the following solutions. At the University of Minnesota, the basic agreement calls for a 33-year contract stipulating that all of the electricity from the cogenerator will be sent to the Northern States Power (NSP) system, except for inplant utilization. All of the university's needs will be purchased on published rates. A credit will be given to the university reflecting a capacity and energy value to NSP. For the Clark University, Worchester, Massachusetts program, the university will utilize all of the electricity they can from the cogeneration facility. They will purchase electricity on a supplemental service rate under a 20 year contract. Sales to the utility is being proposed as an avoided cost to the utility basis.

In the second general area, a series of activities have been undertaken to provide a comprehensive view of the problem and to define appropriate alternatives and tools for analysis. In one of these three worksessions were held with utility representatives. From these work sessions a consensus was reached that the present methods of analysis does not provide adequate information for the utility to evaluate the total impact (positive or negative) of multiple cogeneration units on the utility or the grid if the utility is a member of a power pool. Work is now underway to provide that data through analysis.

We are also completing the development of cost-allocation, guidelines that will guide in determining the appropriate sharing of the costs and benefits of cogeneration between the thermal and electric products from the cogeneration facility. In addition a State-by-State analysis of Public Utility Regulation has been conducted to determine the impact of utility regulations on community energy system including cogeneration and district heating and cooling with or without cogeneration. This effort is nearing completion and is expected to be finalized in FY 1980.

Mr. DINGELL. Now, I observe that you have energy impact assistance in conservation. Can you tell me why that is there?

Ms. SAVITZ. When the Department realined its functions in October, it was decided that what had been Sam Hughes' operation, which included energy impacted assistance, consumer affairs, congressional affairs, would be distributed throughout the Department and at that point the energy impact assistance program was transferred to the Office of Conservation and Solar Energy and is presently under John Millhone in Buildings and Community Systems.

He has had an active program for several years in the community systems area on the conservation side and also helping do a model program in North Dakota to see how communities might prepare, where there was a boomtown effort, to plan their resources, possibly to use waste heat that might be generated from the new sources, for example.

Mr. DINGELL. It may be that this makes good sense and it may be that it does not. I have known Mr. Millhone I guess for about 20 years and I have great respect for him. He used to live out in Michigan years ago. But I have a curiosity as to why this is there.

Mr. Millhone, can you tell us? Because you couldn't figure out where else to put it?

Mr. MILLHONE. Mr. Chairman, the conservation system, the Community Systems Division looks at how a community uses energy and the different systems that might make its energy use efficient such as district heating. It also gets into community energy planning to try to determine future energy requirements and how they might be provided. In a related area we have looked at in Mercer County, N. Dak., where a community is impacted by a large coal mining development, and used some of the same community systems, training, planning, and communications systems there assist that community to adjust quite well to the impacts of that coal mining development.

Because of the experience in that particular project and the community systems division's general mission to look at energy planning as it affects the community, it was felt that this was a logical place to assign the impact assistance program.

Mr. DINGELL. Now, you have at page 9 of your major statement allusion to a number of the Federal Government's building conservation programs, including financial incentives, tax credits, grants, proposed loan subsidies, as well as information programs, efficiency standards for new guidelines and appliances, and research and development activities.

What are you doing to make that information available to the public at large so that they can respond to the program, participate in it, or can derive the benefits from it? What is your advertising budget? What is the number of people that are getting this information out? How are you getting this information out?

Mr. STELSON. There is a complexion of various kinds of information systems. Just in conservation and solar energy, we put out as best as I can figure 26 million pieces of literature that are given away free. This would be energy information.

There are also exhibits and public service announcements, both for TV and radio. Recently there has been some paid advertising and just in the last week we have had an independent analysis of the effectiveness of that program. It was called low cost/no cost. It was focused in New England primarily for the purpose of reducing the use of imported oil, and the data with the conservative analysis showed that for every dollar expended the residential homeowners saved $26 in energy in this year.

So this is I think a very effective effort. It is a relatively new activity, but I think it has great promise for getting specific information to individuals so that they can do the right thing.

Mr. DINGELL. The Chair is going to request the staff to inquire further into this matter and ascertain what is going on there. I feel that without a major emphasis on getting information programs out and inviting participation by Government units and elsewhere and by citizens, by industry, this program is not going to be as effective as it should be.

Tell me, you have within your jurisdiction, as you refer, a number of standards with regard to consumer products. You refer to these on page 9. Do you deal with the consumer appliance standards?

Mr. STELSON. Yes.

Mr. DINGELL. Can you tell us how that program is going, please? Are you making your deadline?

Mr. STELSON. Mr. Millhone is also our expert on that program area, if I may refer this question to him.

Mr. DINGELL. It is my recollection that none of your consumer appliance standards were on schedule.

Mr. MILLHONE. Mr. Chairman, that activity is currently on schedule. We expect to issue the proposed standards for the first nine appliances in May with the final standards in December of 1980. That does meet the statutory schedule.

Mr. DINGELL. It does meet the statutory schedule?

Mr. MILLHONE. Yes. The final four standards will be in December 1981. We feel as if that program, although there may be a slippage of a week or two, that no serious slippage is expected on that program.

Mr. DINGELL. If only a week's slippage, you will not get a complaint from me.

The Chair observes a number of my colleagues here present. The Chair is going to ask one more question and then defer.

What is the situation with regard to building codes? Building codes are a major inhibiting factor to a number of local rules and regulations and so forth and statutes do inhibit energy conservation and proper construction of buildings. What is being done on that matter by your agency?

Mr. MILLHONE. Mr. Chairman, we have work underway with the different code jurisdictions that is aimed primarily at the changes that would be needed in local codes in order for them to be in compliance with the building energy performance standards. That activity should lead to a considerable flexibility in how buildings are designed in order to meet that performance target.

Mr. DINGELL. What are your deadlines on that statute? What are your in-house deadlines and when will you complete the program?

Mr. MILLHONE. The deadline for the publication of the final standards using all the discretionary time allowed by statute is August 14, 1980. We expect to meet that deadline.

Mr. **Dingell**. You will meet that deadline.

The Chair is going to recognize my colleague, Mr. Stockman.

Mr. **Stockman**. Thank you, Mr. Chairman.

I would like to go back to the building standards issue a little bit and I am wondering if you could give me some clear indication of the methodology used because, from what I heard, I don't feel I understand it too clearly. You have established 21 categories and those are just broad, functional categories of buildings, single-family residences, multiple, warehouses, and so forth. As I listened, it sounds as though within each of those functional categories the primary determinant of the permissible energy budget seems to be the square footage of the structure but, of course, that is only one utility value that people get out of a building.

There are a lot of other things, especially when you get into the single-family residences. Some people like a lot of window space; some not very much. Some people want to build on the west side of a valley that looks down over the creek where the winds blow in, and so forth. How did you factor in all of these site-specific, utility-specific, considerations which obviously will affect energy consumption rather substantially?

Mr. **Millhone**. Mr. Stockman, the statute gives the Department the objective of setting a performance standard. The question then that arises is: How do you format that performance standard?

We looked at a variety of different formats, such as Btu's per square foot, or Btu's per cubic foot, or in the case of restaurants or hospitals some performance standard based upon the number of meals cooked or the number of patients in the hospital.

We found the closest correlation to be between the Btu's per square foot between the design of a building and the actual building consumption. In addition, this was a procedure that was relatively simple and had been used in the design community before.

That led us to pick the format of Btu's per square foot as the format that we would use in giving the numbers that constituted the design targets.

Mr. **Stockman**. I understand the measure. What I am trying to get is how did you reach the target? Obviously this is a kind of technology-forcing effort, but nevertheless there is more to consider than merely the interior space to be heated or cooled in a building.

Somehow you arrive at that target and I am wondering whether you consider all of the possible variations that are built into the target so that there is some flexibility? Are you talking basically about structure more like thermally contained boxes that don't do much more?

Mr. **Millhone**. Mr. Stockman, we use basically three criteria in addition to those that are in the statute in determining the BEPS numbers.

These included an examination of a large number of buildings that were designed in the mid-1970's and then we used teams of architects that received special training on how to design energy-efficient buildings and they redesigned that survey of buildings to find out what kind of energy efficiencies could be achieved. That redesign effort and survey work was primarily important in the commercial building sector.

In addition, we did some life-cycle cost analysis. This involves developing a prototype of a building, developing different conservation measures that would make it more efficient, developing a cost/benefit study for each of those measures, and then improving the efficiency of the building until the next measure would cost more than it would produce in savings.

The life-cycle cost analysis was primarily important in the residential sector.

In addition, we used, with people from the Department of Commerce, National Bureau of Standards, Department of Defense, General Services Administration, and DOE, and others within Government who are familiar with the design of buildings, we brought them together and got their professional judgment as to what levels could be accomplished.

So it was a mixture of real life experience through the architectural design, economic analysis, and professional judgment that led to the selection of the numbers for the different building types.

In addition to that, there are certain statutory requirements that the standards vary based upon the type of building and on the climate conditions.

Mr. **STOCKMAN**. Let me just pursue that further.

Once you get out of the residential situation and into commercial buildings, let's say, how do you compensate for what goes on inside, because that is obviously going to affect the heating mode or cooling mode rather substantially. Some—even commercial buildings might have a lot of heat-generating equipment that would have to be again compensated for.

How do you take all these complex variations as to the specific uses or functions that a building serves into account in coming up with one uniform number that applies to all buildings of a very broad category with variance for the region of the country?

That is what I can't really feel very confident about.

Mr. **MILLHONE**. Mr. Stockman, we looked not only at the building types that are listed in the proposed regulations. We also have a mixed function building, so that if a building has a restaurant and a hotel and some other activity, then you would take the portion of the building that was devoted to each function to develop the budget for that particular building design.

Secondarily, it is important to realize that we are talking about the design of the building, not its actual performance, so we developed certain standard building operating conditions and then apply those standard building operating conditions to that particular building design to get its design energy consumption, and in developing the design energy consumption, we use a computer model for sophisticated commercial buildings that is able to bring into consideration a wide variety of different design options and building uses, so we feel that this way we are able to, with a reasonable degree of accuracy, come up with design energy budgets that meet the complexity of different building designs that will be constructed in the future.

Mr. **STOCKMAN**. Thank you.

Thank you, Mr. Chairman.

Mr. **DINGELL**. The Chair thanks the gentleman.

The Chair recognizes now the gentleman from Colorado, Mr. Wirth.

Mr. **Wirth**. Thank you very much, Mr. Chairman.

And Mr. Secretary, we are very pleased to have you here. As one who has been very concerned about the relationships of solar energy within the Department of Energy, I was pleased to see the reorganization which created your Office.

I think the last time Maxine Savitz was here we were talking about the fact that solar energy reported to some 15 jurisdictions in the Department of Energy. Apparently some of that has been cleared up.

On that issue, I wanted to ask you about the relationships between Mr. Miller—who, I understand, is the Deputy Assistant Secretary for Solar Energy—and Dr. Sanmartin, who is the Deputy Assistant Secretary for Field Operations and International Programs. I am concerned in particular about who the Solar Energy Research Institute in Golden, Colo., reports to.

Do they report to Mr. Miller or Dr. Sanmartin?

Mr. **Stelson**. Dr. Sanmartin.

Mr. **Wirth**. Does he also have authority over their budget?

Mr. **Stelson**. In the normal sense of the word, they don't have a budget, but they have program funding and——

Mr. **Wirth**. Is he the person who has authority over this program funding?

Mr. **Stelson**. You might say he is their man in Washington and the primary reason and rationale for this organization is as follows:

If you take SERI or the regional solar energy centers, they are funded from the various program activities in the budget in solar energy. One of their difficulties is that they have to respond and interact with 20 or 25 program managers. The program managers don't have an institutional goal, but have a primary goal of getting the best program operation from the funds that they have.

Being located distant from Washington, it is a cumbersome procedure to have to interact with a wide spread of program managers, and Dr. Sanmartin will have the responsibility of organizing that to reduce the interacting load, to stabilize the budget, to establish a budget and monitor it for SERI and the RSEC's. So budget is really a secondary budget that comes out of the program areas.

Mr. **Wirth**. So SERI reports only to Mr. Sanmartin? Is that right?

Mr. **Stelson**. That is correct.

Mr. **Wirth**. Where does SERI get its money? Do they then deal with 20 or 25 different program managers?

Mr. **Stelson**. They deal with Dr. Sanmartin, who deals with the program areas and establishes their budgets.

Mr. **Wirth**. Mr. Miller has no responsibility related to SERI; is that right?

Mr. **Stelson**. That is right, except that he has program responsibility for the solar programs. If SERI does not do the job that needs to be done, then it is up to him to see that that is brought to the——

Mr. **Wirth**. I thought that was Mr. Sanmartin's job. I really don't understand. We have funding, as I understand it, coming through the Assistant Secretary for Solar Energy, Mr. Miller, who is responsible for those 20 or 25 program areas; is that right?

Mr. STELSON. Yes, right.

Mr. WIRTH. Then if SERI doesn't think he is doing the job, Mr. Miller steps in, but Mr. Sanmartin has day-to-day responsibility.

Mr. STELSON. From Mr. Miller's standpoint, programing with SERI would be the same as with an external contract with one of the regional solar energy centers, and so on, and we also have programs, for example, in the NASA agency like JPL or NASA Lewis, and so on. From the standpoint of Mr. Miller, SERI would be another contractor who would be selected to do a specific job, and it would be the responsibility of Dr. Miller and his people to see that the job is done well.

Mr. WIRTH. So Mr. Miller responds to Mr. Sanmartin. Is that right?

Mr. STELSON. No.

Mr. WIRTH. Then to whom does he respond?

Mr. STELSON. SERI no more reports to Mr. Miller than do NASA units.

Mr. WIRTH. Let me repeat what I understood you to say. You said that if they have a problem with one of the programs that SERI is undertaking, then Mr. Miller takes action?

Mr. STELSON. Yes.

Mr. WIRTH. Mr. Miller, therefore, has some kind of authority over SERI.

Mr. STELSON. He would go to Dr. Sanmartin and say we are not getting the job done right, just as he would go to the Director of NASA, JPL, or whatever.

Mr. WIRTH. And so Mr. Miller and his 20 or 25 program managers all have to go through Mr. Sanmartin to talk to SERI; is that right?

Mr. STELSON. In terms of overall institutional concerns, yes.

Mr. WIRTH. And what other concerns would there be that would not go through Mr. Sanmartin?

Mr. STELSON. Day-to-day communications and just regular monitoring that goes on.

Mr. WIRTH. But in terms of responsibility you talked about before, if there is disagreement between one of the program managers and SERI, who handles that? Mr. Miller or Mr. Sanmartin?

Mr. STELSON. If there comes a disagreement, it would be with Dr. Sanmartin. The analogy is just the same as with any other Government laboratory.

Mr. WIRTH. We have heard that for a long time. There have been a lot of logs falling off the desk in terms of accountability, and that is why I am asking you where that accountability and responsibility sits within DOE.

I take it Mr. Sanmartin has that responsibility; is that right?

Mr. STELSON. That is absolutely correct. Furthermore, he has the added responsibility of handling the problems at SERI that do not have program aspects; for example, personnel, and computers, and buildings, and all the institutional characteristics.

Mr. WIRTH. OK. Let me then take the next step.

What kind of discretionary research authority does SERI have to undertake research projects that the various 20 or 25 program managers may or may not think are important?

Other laboratories have discretionary money to undertake various ventures. Does SERI have the same kind of discretionary authority and budget to do so?

Mr. STELSON. They have a small amount of discretionary money; yes.

Mr. WIRTH. How much discretionary money do they have?

Mr. STELSON. About $1 million.

Mr. WIRTH. Against a budget of what?

Mr. STELSON. Their total budget is $107 million. They are also a managing arm for us, so only about 35 of it is for internal activities. The remainder they would put out under contract.

Mr. WIRTH. The original idea of SERI was to create a critical mass of researchers and investigators who could both do long-term research and work on applying that research.

What if that group comes up with targets that they think are very promising? For example, solar ponds. None of the program managers at DOE, as I understand it, are currently pursuing solar ponds. The Israelis have done, as you know much better than I, a great deal of work and have had a great deal of success in that area. What if SERI were to say, "Solar ponds research is important," but DOE says, "Well, solar ponds aren't important"? How do you go about resolving that problem?

Mr. STELSON. First of all, we don't fund any programs for which we don't have funds and this is a major problem in that——

Mr. WIRTH. That makes sense.

Mr. STELSON. So no matter how glorious the idea and how intriguing, if there is no money in any category that is suitable for funding that program, we cannot proceed with it.

Mr. WIRTH. What would happen if a DOE program manager said, "We are going to build 43 solar power towers. We think, in our wisdom at DOE, that this is the direction to go." SERI, on the other hand, with this critical mass of researchers, and the general community on solar energy, says, "Well, maybe solar power towers aren't the highest priority. What we ought to be doing is moving into solar ponds," or "We ought to be moving into designs for low-cost collectors," for example—again another area that has generally been untouched.

How does SERI go about developing that research capability?

Mr. STELSON. This is another positive step in that we are going to closely integrate SERI and their expertise into the budgeting process. In other words, we are working right now on the fiscal year 1982 budget on the initial programing of it and SERI will be intimately involved in that.

Mr. WIRTH. If they are concerned about solar ponds or low-cost collectors, it is in the budgetary process that they should seek approval then. Would they do that research or would that move into some of Mr. Miller's 20 or 25 program managers?

Mr. STELSON. If they can do the research we would certainly I think clearly give them a priority position because we are interested in building up their strength as a major national resource in that area.

Mr. WIRTH. Has there been attention paid to providing SERI, as with national laboratories, broader discretionary authority than they now have—broader funding?

Mr. STELSON. It is my understanding that fundamentally they are currently managed in essentially the same way as other national laboratories. The basic management plan for SERI is exactly the same as Oak Ridge or whatever.

Mr. WIRTH. Other laboratories have more discretionary money. If that is the case, should not these laboratories, which presumably are the focus of a lot of expertise, have more discretion as other laboratories do?

Mr. STELSON. I personally would support that, but I think generally congressional directions have been the opposite.

Mr. WIRTH. Have you ever requested a broader kind of discretion like that? Given all the problems that we have had in the past with DOE organization and the laboratories, it seems to me that one logical way out is to say, "We are going to create these laboratories, whether it is SERI or another laboratory and then give them more discretion." That helps to solve the internal problems.

Mr. STELSON. I understand what you are saying and I would translate that directly back, but I think SERI is relatively young and new and I think we have not had enough management concern for responding to them and especially to what I would call an institutional mission and Dr. Sanmartin and his responsibility is a major new thrust to support, to understand, support and translate that mission into the bureaucracy that we have here in Washington rather than require SERI or any of the regional centers to become experts on the details of the budget and the operating characteristics here.

Instead, the plan is to have here in Washington a small group of experts to interface with SERI and the regional centers so that their institutional goals, which is what you are discussing, can be better recognized and supported.

Mr. WIRTH. I do appreciate the steps that have been taken in terms of cutting down reporting and I hope all of this works.

Thank you, Mr. Chairman. I hope we can come back with another round. I have some other questions I want to ask.

Mr. DINGELL. The Chair thanks the gentlemen.

The Chair recognizes Mr. Kitzmiller.

Mr. KITZMILLER. I would like to ask a couple of questions about the schools and hospital program if I may, which seems to be proceeding with considerable success and speed.

As I understand it, the preliminary energy audit phase of the program is virtually completed now, is that correct?

Mr. STELSON. That is my understanding.

Mr. KITZMILLER. Is that true of the units of local government phase in the preliminary energy audit phase as well?

Mr. STELSON. Let me refer this to Mr. Stewart who will know more about those specific details.

Mr. STEWART. For local government and public care buildings, the DEA awards were made last June. Those activities are presently underway. The preliminary audit activities for schools and hospital buildings are, as was mentioned, by and large, finished at this point. The energy audit component of this is going to take a bit more time.

Mr. KITZMILLER. Am I correct that the principal congressional aim of conducting the preliminary energy audit was to build a statistical basis for evaluating the relative energy needs of the various categories of buildings that were eligible under the program? Is that right?

Mr. STEWART. That is my understanding also.

Mr. KITZMILLER. And I gather that the preliminary energy audits have been used primarily as the basis for the State plans all of which, except for Nevada, are now in?

Mr. STEWART. All of which, except for Nevada, are in, with the exception of two State plans that have subsequently been withdrawn and are being reworked.

Mr. KITZMILLER. Obviously the whole point of that preliminary energy audit program was to develop information with which to guide future efforts in dealing with these areas and Congress apparently thought that the reason for doing that was that these were areas in which particularly large savings in energy could be made.

Is that the view of the Department as well?

Mr. STEWART. That is my understanding, sir, that our need at this time last year was for a firmer understanding of the potential for energy saving and particularly for local government buildings where the data base was really very sparse.

Mr. KITZMILLER. Will there be in the near future a report to Congress on the information that was uncovered in these preliminary energy audits? Presumably that would be very useful to the members of Congress in shaping future programs.

As the chairman corrected me, in any systematized form, that is, analysis that will actually show us what is missing.

Mr. STEWART. Yes, sir, we have begun to take a preliminary look at the data we have already received. We are going to be taking a look at all the data and we will be developing a report.

Mr. KITZMILLER. Do you have any idea when that will be forthcoming? We are on a very tight reporting schedule.

Mr. STEWART. I would prefer to report on that later. My best estimate at this point is that it will be several months before that will all be together.

Mr. KITZMILLER. Presumably, Congress selected the two areas, as I mentioned before, schools and hospitals and units of local government and public care, because they were areas in which the greatest savings could be made. We have now obligated $7 million in the units of local government in public care institutions and there is available about $25 million of appropriated funds in that area, but there is no recommendation in the budget for continuing with conservation efforts with these two categories of buildings. Can you explain why?

Mr. STEWART. One of the concerns that was voiced that you mentioned earlier in terms of getting an adequate data base was the principal concern of both the Congress and ourselves. Our belief is that we need to get adequate data and see what the potential is. At that point we would be in a better position to make a recommendation. However, until we know what the universe looks like and have an idea as to what the potential for savings really is, and what the potential is for interface with other resources that are available to local governments for energy conservation improvements, we are in no position to make further recommendations.

Mr. **Kitzmiller**. Can you tell me how our information differs between the information that is available for schools and hospitals for which we recommended $202 million and units of local government for which we have recommended nothing?

Mr. **Stewart**. The schools and hospitals component, the $202.5 million in the 1981 budget is for the energy conservation measures component by and large. This is approximately $150 million or so. Under the present law, we do not have the authority to get into energy conservation measures with local government buildings. The vast portion of the $202 million will be to fulfill our commitment under the energy conservation measures.

Mr. **Kitzmiller**. In short, what you are saying is, because Congress had authorized a program of technical assistance in energy conservation for schools, we have a recommendation for that on about the same statistical basis, but we do not have a recommendation for municipal buildings simply because Congress has not itself recommended that?

Mr. **Stewart**. Yes, sir, that we at this point do not have authority and we are not at this point in position to recommend about energy conservation measures for local government buildings.

Mr. **Kitzmiller**. One final question, Mr. Stewart. The last time that there was an opportunity to ask questions about schools and hospitals and units of local government, we discovered that of the 50-some slots that were available to be filled, only about, I think, 7 had been filled. This was a year ago and obviously since you anticipate about 10,000 applications, and since it takes about five hours per application, this would have made seven very busy people.

I know that the chairman has raised this issue with both the Bureau of the Budget and with the Secretary, and I wondered if there is now adequate personnel to process these applications when they come in and, if so, what the status is.

Mr. **Stewart**. There have been additional resources assigned to both the headquarters and the regional offices, to handle the applications on the schools and hospitals for cycle one. In addition to additional program staff, there have been additional administrative staff, additional procurement staff, additional general counsel staff, additional civil rights staff. Also in addition to handling most of the activity manually at this time, we are piloting an automated system for processing grant awards. At this point I believe the Department has committed sufficient resources to handle the first cycle. Whether those resources will be adequate for the second cycle, will depend on how well we do with the automated approach and if that proves out, we will probably have sufficient resources for handling not only the application processing, but also for servicing the grants later on.

Our present projection for staffing requirements has been based by and large on handling the application processing rather than on servicing the grants that would follow on.

Mr. **Kitzmiller**. We seem to be at a very critical point in determining the success of this program which is probably the largest single conservation program under the Department's jurisdiction.

With the chairman's permission, I would like to request that we be given regular, perhaps monthly, reports, on the status of applications and also on the adequacy of the staff and the findings of your experimentation with automation if that is not going to take too much time.

Would that be appropriate?

Mr. **Dingell**. I would think that would be very helpful. We don't want to burden you down there, but I do think close monitoring by this committee has virtues as well as vices.

Mr. **Stelson**. We would be delighted. We are monitoring it closely so we should have the information available for you.

Mr. **Kitzmiller**. I don't know if we could process it on a weekly basis, but if we do get it on a monthly basis, I think it would be very valuable.

[The following report was received for the record:]

STATUS OF THE SCHOOLS AND HOSPITALS GRANTS PROGRAMS

As of February 8, 1980, 3,503 technical assistance applications and 1,500 energy conservation measure applications have been submitted to DOE Regional Offices. These figures represent only partial totals within Regions. The date by which States must submit applications to DOE Regional Offices in order to guarantee processing during the first grant program cycle (GPC) is February 19, 1980. Subsequent to that date more accurate information can be provided regarding application status.

As a test of the automated Notice of Grant Award (NGA) system, applications from only one Region, Region II (New York, New Jersey, Puerto Rico and Virgin Islands), are being processed by this system during the first GPC. As of February 15, 1980, 130 NGAs have been processed and shipped back to the Regional Offices for issuance.

It is anticipated that the first monthly status report on applications, staffing and the automated system can be provided by February 27, 1980.

Mr. **Kitzmiller**. Thank you very much, Mr. Chairman.

Mr. **Dingell**. Thank you.

Mr. Wirth?

Mr. **Wirth**. Thank you very much, Mr. Chairman.

Mr. Stelson, what is the administration's position on the solar information center language initially included in S. 932?

Mr. **Stelson**. I am not really up on these details.

Mr. **Wirth**. I think this is more than a detail. There is a major battle going on over where solar energy information ought to be.

Mr. **Stelson**. There is currently more than one center and we are in the process of building up capability at SERI to handle this. For example, we are involved in all spectrums of solar energy.

I think this week we will be opening the alcohol fuels hotline, but until they had a computer and had some other institutional resources, they were ill prepared to handle——

Mr. **Wirth**. Is it your position that the information center and information distribution ought to be at a place like SERI, next to the researchers, and not in some other place? Is that correct?

Mr. **Stelson**. If they can build up capability to handle this, I think that is a very good plan, yes.

Mr. **Wirth**. That is also the position that has been taken by the regional centers, States, universities, and so on—that it should not be put somewhere else.

Can you tell me what the current plans are and the anticipated timetable for the SERI building?

Mr. **Stelson**. There is $10 million in this budget and a recommendation of $45 million in the 1982 budget. That is the best of my recollection.

Mr. **Wirth**. Would it be possible for you to send me your projections of authorization and appropriation and what you think is also happening with inflation to the cost of that building? As you probably know, Mr. Stelson, SERI has been down-sizing that building for the purposes of the tight budget that we are all aware of.

Mr. **Stelson**. Yes.

Mr. **Wirth**. As it gets down-sized and spread out over a period of time, the inflation rate in the building trades in Denver is currently running at a little more than 18 percent a year and it is like being between a rock and a hard place in an attempt to get the building within the budget and spread it out. It just is getting eaten alive by the inflation rate.

What I was hoping I might be able to get from you would be the most recent DOE projections on what is going to happen to the cost of the building and what your plans are for funding it.

Mr. **Stelson**. I will be glad to do that. I apologize for not having the information. It was my understanding that the solar programs would not be considered here today, or I would have been better prepared. But I will be delighted to furnish you with that information.

Mr. **Wirth**. Thank you.

[The following information was received for the record:]

Funding for the SERI Permanent Facility

The total cost of the SERI permanent facility is currently estimated to be $98,500,000. Projected funding requirements are as follows (in thousands of dollars):

Fiscal Year	Authorizations	Appropriations	Obligations	Costs
1979	$ 3,000	$ 3,000	$ 3,000	$ 677
1980	10,000	6,900	6,900	6,900
1981	10,000	10,000	10,000	10,000
1982	75,500	45,000	45,000	35,000
1983	0	33,600	33,600	29,200
1984	0	0	0	16,723
Total	$ 98,500	$ 98,500	$ 98,500	$98,500

Preliminary design activities were initiated in January 1980, and will be completed by June 1980. Detailed design will be initiated in July 1980, with some construction activities to commence in the fourth quarter of FY 1980. Construction is scheduled to be completed by the end of the third quarter of FY 1984.

The previous cost and construction schedule was based upon very preliminary data prior to the initiation of the conceptual design. There have been no significant delays in the planned construction schedule which would affect current budget estimates.

Mr. **Wirth**. Mr. Chairman, there was also another question about the achievement of this 30 percent, which came up in the Science and Technology Committee last week, that I would like to pursue, if that is all right.

Mr. **Dingell**. I think it might be helpful.

Mr. **Wirth**. I think it would be, and I think it would be helpful to the Department of Energy to be focusing on this as well.

As you know, the policy and evaluation section of the Department has compiled a list of renewable resource technologies which are designed to help the Nation achieve President Carter's goal of providing the Nation's energy from solar and other renewables by the year 2000.

That requires a target of 18 quads to come from a variety of sources, and we obtained from planning and evaluation the following breakdown as to how you achieve that 18 quads. High and low head hydro provide 4.3 quads; biomass and wood, 5.4 quads; residential and commercial heating and cooling was 2 quads; passive solar heating and cooling, 1 quad; agricultural and industrial process heating, 2.6 quads; wind energy, 1.7 quads; and photovoltaic energy provides 1 quad.

I am sure you are familiar with all of these. Do you think these are achievable goals?

Mr. **Stelson**. I think the 20-percent goal is a very achievable goal. Whether the mix will be exactly this mix or not 20 years from now, I think is very hard to certify. For example, biomass could deliver as much as twice its present contribution to the goal, for example.

Mr. **Wirth**. What happens, as you know, to budgets in Federal departments is that you assume targets in various areas, and then planning and evaluation and the budget people start to work together and you start to generate numbers and budget commitments related to particular goals.

Do you know if the 1982 budget you are working on now is picking up on these projections within the 18-quad goal? In other words, if you break down the 18, is planning and evaluation working on that, or on a more flexible approach? You were saying maybe twice as much might be targeted for biomass.

Mr. **Stelson**. We are doing two things. We are working on these goals and with them, but we are not plotting out a step-by-step, 20-year procedure. We are also doing a reassessment. Since these goals were based upon studies that are now about 2 years old in the short history of solar energy, we have probably done at least as much research since they were established as before.

Mr. **Wirth**. That is why I am raising the question.

Mr. **Stelson**. So there is a lot of good information.

Mr. **Wirth**. I have two concerns related to this breakdown given to us by planning and evaluation. One is that the data is, as you suggest, 2 years old, and we have learned a lot since then.

Second, there develops a problem once you set a number like this. When you are trying to arrive at that number, the budgetary and the planning people tend to say, "What do we have to do to achieve our goal of 1 quad through photovoltaics?" That is one approach you can legitimately take.

There is another one that can be taken, which is, "What is the potential of photovoltaics more broadly, which might produce significantly more if you turn the thinking around, between if I say let's get 1 quad from photovoltaics."

Mr. Stelson. I agree with you completely. Ultimately, there should be ranges, and, as time moves on, some technologies are going to be much more successful than others.

Mr. Wirth. Exactly. I just wanted to bring to your attention the numbers we have been given and to alert you to the fact that your 1982 budget might be driven incorrectly by some earlier assumptions made. I am concerned that that not happen, because the changes are going to occur. As an old HEW budgeter, I know how you can grind the numbers in a variety of ways.

Thank you very much, Mr. Chairman.

Mr. Dingell. The Chair is going to recognize Ms. Mathews for questions.

Ms. Mathews. I would like to return to the appliance standards program for a minute. In the budget submission, the Department indicates that what you are developing are efficiency standards and test procedures for major household appliances and plan to support a regulatory program aimed at developing minimum standards for 13 major household appliances.

I note in response to questions that the chairman asked in his letter that the entire $7.9 million requested for fiscal year 1981 is to go to contracting, with numerous contracts for studies or development of films or library exhibits or appliance efficiency contests, and acquisition of technical information.

When do we expect that there will actually be standards set for those 13 appliances?

Mr. Stelson. I will refer that to Mr. Millhone.

Mr. Millhone. Ms. Mathews, we expect the proposed standards to be published in May, with the final standards to be published in December 1980.

Ms. Mathews. How many people are in your division overseeing the $7.9 million in contracts?

Mr. Millhone. There are 13 people in the branch that has the responsibility in that area. They receive support from people who are in the research and consumer products areas and also people doing economic analysis. But that is the core staff.

Ms. Mathews. Those 13 people, are they spending their time analyzing the sorts of information that is coming in from these contracts, or are they merely managing the contracts?

Mr. Millhone. They are engineers, by and large, and they are analyzing the information that is coming in from the contracts.

Ms. Mathews. Can 13 people make sense out of as many contracts as seem to be out, and with as much variety as there is? I mean the point is to gather some information about appliances and set standards. This has been going on now for some time.

Mr. Millhone. In that area, I feel as if we are getting adequate supervision and monitoring of the work being done by the contractors.

Ms. Mathews. I would like to ask for some clarification on pages 24 and 26 of the budget, as there is a little confusion in my mind.

In the technology and consumer products area, there is a reduction of $7,360,000. I guess it is for the 40 kilowatt fuel cell demonstration, as I understand it. There was a separate authorization for that fuel cell, but it is puzzling because the numbers don't seem to add up. Can you explain that?

Ms. SAVITZ. In the fiscal year 1980 appropriation there was $9 million to begin a 40-kW fuel cell demonstration program. That program is underway now. There is currently no money in the 1981 budget to continue that into 1981. We are presently reviewing that in the department to decide whether we will submit an amendment or not. In this year's appropriation of 29.6, 9 of that was for the 40-kW fuel cell, so there has been some actual growth of a couple million dollars in the technology and consumer products area.

Ms. MATHEWS. Thank you very much.

In the industrial conservation area, I would like to know what mechanisms or procedures the Department has, or does it intend to put in place, to insure the recovery of the Government's investment in industrial conservation projects when those projects are successful particularly as it would seem that in many cases the investments are not terribly risk-ridden. Is there any process for such recovery?

Mr. STELSON. I will refer this question to Mr. Harvey, in charge of the Office of Industrial Programs. Every R. & D. program that we enter into has a significant degree of risk; that is one of the reasons we are in it. We try not to duplicate any of the activities that are underway in the private sector, and one of our ways of evaluating that determination is to evaluate the risk associated with each project, and if it falls outside a certain envelope that historically the private sector has pursued, then it is eligible—not necessarily it is going to get—but it is eligible for Federal funding.

Every R. & D. program has various levels of achievement. There are research programs, prototype development programs and full-scale demonstration programs, and we fund programs in each of those categories.

In the laboratory development phase and in the prototype phase we generally do not require the contractor that is involved to pay back the Government for the Government's share, although all of those programs as well are cost-shared.

But when a program gets to the full-scale demonstration phase, we do one of two things. We either ask the contractor to pay the Government back for its investment in the hardware associated with that full-scaled demonstration at some reasonable rate—it would be a depreciated rate after the demonstration programs were complete—or we don't invest in the hardware; we only invest in the documentation of the performance of that system during the demonstration phase.

Does that answer your questions, Ms. Mathews?

Ms. MATHEWS. More or less. I guess what it really says is that you go on a project-by-project basis.

Mr. HARVEY. More or less, but let me explain again. The full-scaled demonstration, where a specific technology is actually being used in the production of some output, then the contractor or the group of contractors involved gets specific benefits from the output of that, and then we would ask for some kind of payback to the Government.

Ms. MATHEWS. Thank you.

Also, on the industrial conservation area, it would seem that the fiscal year 1981 budget request would add four people to your staff. Is that correct?

Mr. HARVEY. That is correct.

Ms. MATHEWS. There also has seemed to be perhaps less emphasis than would be appropriate on achieving in the industrial energy conservation area savings in the petroleum and petrochemical industries. Would you envision placing more emphasis on petroleum and petrochemicals and perhaps assigning one of those new staff to that function?

Mr. HARVEY. Yes. As a matter of fact, I talked to the staff member of this committee last week, and we are seriously considering adding a person very knowledgeable in the petroleum refining and chemical industries.

I would like to point out the comments I made to him. Those two industries independently invest very heavy R. & D. funds in comparison, for example, to steel or aluminum. As a consequence, we have traditionally placed less emphasis on Federal R. & D. in those industries.

There is another reason for that as well. Those industries are characterized by unit operations, distillation, evaporation, and so forth, that are relatively small units of equipment that can be paralleled with new technology, with relative ease. You can't do that with a blast furnace or basic oxygen furnace. There is a very large capital investment that cannot be paralleled easily.

So it has been our perception to this point in time, at any rate, that the chemical and petroleum refining industries are relatively self-sufficient in the development of advanced technologies, in comparison with some of the other energy-intensive industries we deal with. There are some very unique advance concepts that have come to our attention recently that look like they have significant potential, and we probably will start programs in those areas.

Ms. MATHEWS. Thank you.

Mr. Secretary, I wonder if I could request that you provide for the committee a breakdown of the requests for $4.5 million according to the key activities described on page 61 of the budget book, and can you also provide the amount of that to be dedicated to contracts?

Mr. HARVEY. I can do that right now, if you like.

Ms. MATHEWS. If you have that, it would be useful.

Mr. HARVEY. The industrial reporting effort is $200,000. The requirements mandate by the National Energy Act of last year is $800,000. The deployment of existing but underutilized technologies, as well as the new technologies coming out of the R. & D. program is $3.5 million. All of that work is contract work.

The budget items that we have included in the industrial budget are all contractual items. They may be done in national laboratories, or with private contractors as well.

Ms. MATHEWS. When the information gained from those contracts is in, how many people do you foresee putting to work making use of that information, implementing the program, getting out standards, say, for pumps and motors?

Mr. **Harvey**. You are asking two different questions. If you are talking about the implementation of the pumps and motors program, we have not put into our budget the cost of developing the test procedures, labeling procedures, and standards, for a very specific reason. The report on that program that was mandated by Congress in the NECPA legislation is due to the Congress in May. We have a draft of that report now, and we suspect that it may be feasible to set standards on motors. Pumps look very unlikely because of the wide variation in the use of even an individual pump type, but for motors, a standard appears to be feasible.

Ms. **Mathews**. What about the labeling aspect, or testing?

Mr. **Harvey**. Well, you know, if you look at motors again, the test procedures that have been established by motors for the private industry look very, very adequate to us. We are going to ask the National Bureau of Standards to review it again, but the test procedures look pretty good. Labeling, then, becomes a relatively minor activity, once one knows the performance of a given motor. Labeling does not look like a very cost-intensive effort.

Mr. **Dingell**. I am glad the staff is asking this question, because it has been something troubling me. As you know, the Senate has already passed legislation for standards in this area. I am troubled about the point that is raised here.

If you have a motor which is used for just a very small portion of the time, for some very important function, let's say for an exhaust fan to exhaust dangerous gases if they build up in a particular level at an industrial process, you may want a powerful, quick-responding motor to run that fan, and it might not be very efficient to replace it with an efficient fan, and you might find you would not get a quick response, or not the amount of power you wanted, and you had spent a whole lot more money.

When we considered this question years ago, we considered the question you might have a fan which would be in exactly that kind of place under exactly those kinds of circumstances. Then the question arose, should we have that fan at that point in the industrial process chain, or have a more fuel-efficient fan that might cost a lot more, might not give the response, might not have the precise characteristics necessary for the task.

How do we build that into a standard?

Mr. **Harvey**. Your concerns are exactly the concerns I expressed in testimony before Senator Metzenbaum on this very subject last year; and I think we may have a solution to that problem. If standards would be set for motors, we anticipate those standards only to be set for continuous-duty, polyphase motors used in the industrial sector. In the case of unique motors that require extremely high reliability and torque, I can't anticipate our setting standards for that type of application.

Mr. **Dingell**. Can you distinguish between the two kinds of motors?

Mr. **Harvey**. Yes, sir, we can.

Mr. **Dingell**. Can you distinguish between the two types of duty?

Mr. **Harvey**. Yes, sir, we can.

Mr. DINGELL. But you say you cannot deal with the question of pumps?

Mr. HARVEY. I say the setting of standards for pumps is a very difficult problem, because even an individual pump would have totally different characteristics in different applications, and, as a consequence, if one were to set a given head for a pump under standard load conditions, that would have relatively little to do with its efficiency when applied to pumping a different fluid under different pumping conditions and under different load conditions.

Mr. DINGELL. Probably you have a pump that has a draw and a pump that has a push, and the pump that goes down to the bottom of an oil well to pump, and you got a pump that is set up to deal with irrigation questions.

Mr. HARVEY. You are exactly right, sir, and at this point in time, our perception is—understand that this is a draft report at this point in time, and we are carefully going over it, and we will get public comments on it—at this point in time, we think it is very difficult to establish standards for pumps, per se.

Mr. DINGELL. Do you suggest that perhaps we ought to at least have an efficiency-labeling requirement?

Mr. HARVEY. It is very difficult to do that, too, because of the variation in efficiency for a given pump under different applications. We could set up a label that says this pump will pump a 100-foot head of water under those load conditions, but that is a relatively meaningless label. You have to look at a pump in its specific application before one can establish how efficient it is versus some other pump that could have been used in that same application. This represents a difficult problem.

There are some new technologies coming to the fore that look attractive in terms of pump motor combinations, rather controversial technology as far as the Congress is concerned. Exxon has developed what they call an alternating current synthesizer that allows a motor/pump combination to be fed in alternating current. It scrambles that alternating current and provides a frequency that corresponds to the demand of the pump's system. It would produce in that case very high efficiency under partial load conditions, and that looks like a very attractive alternative to setting such things as standards for pumps, themselves. Allowing the pump to be used under partial load conditions with different viscosity fluids would significantly improve the performance of the pump/motor combination.

Mr. DINGELL. I see.

Ms. Mathews?

Ms. Mathews. I have just one more question, and that goes back to the Federal Energy Management Program. During last year's hearings before this subcommittee, there was some discussion of the department's own in-house efforts to conserve energy, and I wonder if, for the record, you can supply an update of the sort of projects being undertaken and the amounts of money being committed.

Ms. SAVITZ. We are putting in the budget for this year in the 1981 submission, an increase over last year. The total requirement is $56.9 million.

Ms. MATHEWS. For DOE's own energy savings effort?

Ms. Savitz. Yes, and we can get a breakdown of the type of projects planned for that, and also in this fiscal year.

Ms. Mathews. That would be most useful. Thank you.

[Testimony resumes on p. 252.]

[The following information was received for the record:]

DOE'S OWN IN-HOUSE RECORD OF ENERGY SAVINGS

Since 1973, the Department has been able to reduce consumption by about 7.1 percent with no-cost and low-cost operational changes such as lighting and temperature reductions and by better management of production and research efforts. In FY 1977 and FY 1978, we reprogrammed $5.2 million and $9.8 million respectively in addition to the $1.7 million approved by Congress in FY 1978 in order to begin a program of retrofits to improve the energy efficiency of both our buildings and our processes.

As you know, in FY 1979, Congress approved $11.5 million for our retrofit efforts. Because it takes one to two years to select an engineering firm, design, and then advertise, bid, award, and accomplish the construction retrofits, only a small portion of the investment made to date was completed in FY 1979 and contributed to energy conservation. Below is a summary of the FY 1979 projects being accomplished. As can be seen, typical projects include a large number of modifications to heating, ventilation, and air conditioning (HVAC) systems to improve efficiency as well as a number of waste heat recovery projects.

We have been able to hold energy consumption to an increase of only three percent in FY 1979 as compared to FY 1978, even in the face of a 12 to 13 percent increase in funding, or level of acitivity, at our field sites. We have already reduced our consumption by 3 percent in the first quarter of FY 1980 as compared to FY 1979

The attached information shows the appropriation provided to DOE in FY 79', FY 80' and our budget request for FY 1981 regarding in-house energy management.

Policy and Management
Departmental Administration - Operating Expenses
Departmental Administration - Plant and Capital Equipment
(Tabular dollars in thousands. Narrative material in whole dollars.)

	FY 1979 Appropriation	FY 1980 Appropriation	FY 1981 Base	FY 1981 Request
In-house Energy Management (AD)				
Survey and Central Plant Studies:				
Operating Expenses...............	$ 3,600	$ 3,600	$ 3,600	$ 3,900
Subtotal.........................	3,600	3,600	3,600	3,900
Modifications for Energy Management, Various Locations:				
Construction.....................	2,655	15,000	15,000	28,200
Subtotal.........................	2,655	15,000	15,000	28,200
Heating, Ventilating, and Air Conditioning, Heat Recovery, Richland, Washington:				
Construction.....................	4,000	...	...	...
Subtotal.........................	4,000	...	...	...
Process Waste Heat Utilization, Gaseous Diffusion Plant, Paducah, Kentucky:				
Construction.....................	4,800	...	...	...
Subtotal.........................	4,800	...	...	...
Process Waste Heat Utilization, Portsmouth Gaseous Diffusion Plant:				
Construction.....................	...	4,200	4,200	...
Subtotal.........................	...	4,200	4,200	...
Automated Energy Management System, Pantex Plant:				
Construction.....................	...	4,000	4,000	...
Subtotal.........................	...	4,000	4,000	...
Conversion of Boiler #5 to High Sulfur Coal, Argonne National Laboratory:				
Construction.....................	...	5,000	5,000	...
Subtotal.........................	...	5,000	5,000	...
Alternate Energy Source, Pantex Plant:				
Construction.....................	...	...	...	9,000 b/
Subtotal.........................	...	...	...	9,000
Energy Monitoring & Control System Y-12 Plant:				
Construction.....................	...	...	...	5,000
Subtotal.........................	...	...	...	5,000
Energy Monitoring & Control System Oak Ridge National Laboratory:				
Construction.....................	...	...	...	4,000
Subtotal.........................	...	...	...	4,000

	FY 1979 Appropriation	FY 1980 Appropriation	FY 1981 Base	FY 1981 Request
HVAC Heat Recovery and Night Setback, Richland, Washington:				
Construction..................	...	...	...	3,000
Subtotal..................	...	...	...	3,000
Automated Energy Management System, Argonne National Laboratory:				
Construction..................	...	...	...	3,800
Subtotal..................	...	...	...	3,800
Total				
Operating expenses..............	3,600	3,600	3,600	3,900
Construction....................	11,455	28,200	28,200	53,000
In-house energy management....	$15,055	$31,800 a/	$31,800 a/	$56,900 b/

a/ Excludes $4,850,000 supplemental approved by OMB for Alternative Energy Source projects at the Pinellas and Pantex Plants.

b/ Includes $9,000,000 appropriation for the second year's funding of the Pantex Alternative Energy Source project initiated with the FY 1980 supplemental.

Authorization: Sec. 102 (a), P.L. 95-238

Summary of Changes

FY 1980 Appropriations enacted..	$31,800
Program Increases and Decreases	
Additional Energy Conservation Surveys and Central Plant Studies...............	+ 300
Increase number of small retrofits for energy conservation......................	+13,200
Complete Process Waste Heat Utilization, Portsmouth Gaseous Diffusion Plant.....	- 6,200
Complete Automated Energy Management System, Pantex Plant......................	- 4,000
Complete Conversion of Boiler #5 to High Sulfur Coal, Argonne National Lab......	- 5,000
Continue Alternative Energy Source, Pantex Plant................................	+ 9,000
Initiate and Complete Energy Monitoring and Control System, Y-12 Plant..........	+ 5,000
Initiate and Complete Energy Monitoring and Control System, Oak Ridge National Laboratory..	+ 4,000
Initiate and Complete HVAC Heat Recovery and Night Setback, Richland, Washington	+ 3,000
Initiate and Complete Automated Energy Management System, Argonne National Laboratory..	+ 3,800
FY 1981 Budget Request..	$56,900 a/

a/ Includes $9,000,000 appropriation for the second year's funding of the Pantex Alternative Energy Source project initiated with the FY 1980 supplemental.

In-house Energy Management

The FY 1981 budget request for the In-house Energy Management program is $56,900,000 [a], a $20,350,000 [b] increase over the amount appropriated in FY 1980. A major portion of the growth in funding requirements in the program can be attributed to the fuel conversion program at DOE, iniatied with a pending FY 1980 supplemental and the support of additional small energy saving projects at various field sites. Continuation of the Pantex fuels conversion accounts for $9,000,000 of the overall increase. The Directorate of Administration is responsible for this activity. Program funds will be expended within the coterminous United States.

The requested amount reflects a continuing emphasis on energy conservation and alternative energy sources through expanded construction retrofit and fuels conversion projects. Major program objectives are to: (1) reduce energy consumption by 20 percent in all DOE buildings and facilities by 1985 from a 1975 baseline; (2) retrofit all DOE buildings with cost-effective energy conservation retrofits by 1990; and (3) eliminate the use of natural gas and fuel oil in all major DOE fuel burning installations. Specific program elements consist of:

- studies of existing buildings to identify cost effective energy retrofit projects and surveys of central plants to develop fuel conversion requirements;
- retrofit construction projects that employ selected energy management concepts and systems at various field sites to reduce energy consumption; and
- fuels conversion projects to switch central heating plants from fuel oil or natural gas to alternative sources of energy.

This year's proposed funding level is necessary to accomplish established energy-saving and fuels conversion goals outlined in Executive Order 12003, the National Energy Conservation Policy Act of 1978 (P.L. 95-619), and the Powerplant and Industrial Fuels Use Act of 1978 (P.L. 95-620). The continuation of energy conservation surveys will allow the identification of the facilities that can be economically retrofitted to produce maximum energy savings. Support of central plant studies will permit the determination of which major fuel burning installations can be economically changed from natural gas or petroleum to other alternative forms of energy. The funds requested in FY 1981 will allow for energy surveys sufficient to maintain a program of retrofit project investments and provide for the conduct of the two studies required annually to plan for the fuel conversion of selected major DOE central heating plants. The retrofit and fuel conversion projects, as well as the associated surveys and studies, are vehicles for accomplishment of legislative and Presidential goals integral to the Federal energy management effort.

Investments in energy saving projects for the last three years will result in a total reduction in Department energy consumption of about 5.4 percent, or 800,000 equivalent barrels of oil annually. Proposed FY 1981 retrofit projects will further decrease DOE energy consumption by approximately 5 percent, an annual savings of 750,000 barrels of oil equivalent. Investments in three fuel conversion projects will eliminate the use of 1,250,000,000 cubic feet of natural gas, or the equivalent of 220,000 barrels of fuel oil, and substitute in its place non-critical fuels such as coal. These benefits also include savings to be realized from Pantex and Pinellas conversion efforts to be funded through a combination of a pending FY 1980 supplemental, the FY 1981 request and the FY 1982 budget. In addition, the program will produce an annual energy cost savings of approximately:

- $4,300,000 for projects funded in FY 1978;
- $3,700,000 for FY 1979 funded projects;
- $5,900,000 for projects to be initiated in FY 1980; and
- $11,900,000 for proposed FY 1981 project efforts.

The following is a summary of major projects at DOE:

	1980	1981
Surveys and Central Plant Studies..............................	$3,600	$3,900

The operations funds are required to accomplish formal surveys of existing utility systems or buildings to identify and document retrofit projects to reduce energy consumption. These surveys will accomplish the necessary engineering investigations to document energy savings resulting from a proposed project, address life cycle costing to assure project cost-effectiveness, and produce cost estimates and budget documents for the proposed project. These funds will enable the agency to continue surveys of about 15 percent of DOE space. This level of effort will identify enough projects at various DOE-owned facilities for future funding to achieve the 20 percent reduction in energy consumption mandated by the President if the projects are funded. The conversion of two central heating plants to coal or other more abundant fuels will also be studied. Two plant conversions per year are required annually in order to convert all major DOE central heating plants by 1995.

	1980	1981
Modifications for Energy Management, Various Locations.........	$15,000	$28,200

This line item is for various small retrofit projects of less than $1,500,000 in scope, and will provide about half of the annual investment required to achieve the 20 percent energy reduction. These small modifications are selected on the basis of energy saved per investment dollar, total dollar return on investment, and length of time required to payback investment. Projects compete on a DOE-wide basis for funding under this lump sum item, thus assuring the greatest dollar return and greatest energy savings per investment dollar for the Department. This project will save 450,000 equivalent barrels of fuel oil and has an average payback of 4.2 years.

	1980	1981
Energy Monitoring and Control System, Y-12 Plant, Oak Ridge, Tennessee	$ ...	$5,000

This project provides for the monitoring and controlling of the energy in approximately 20 percent of the buildings in the Y-12 area. The system will monitor and control the heating, ventilating, and air conditioning (HVAC) systems with sensors of various types located at the points to be monitored. Sensor data will be transmitted to a central location which will have the capability of issuing commands to make real-time adjustments to various system parameters with response occurring immediately. A combination of hardware and software will permit simultaneous data acquisition, output printing and operator communication. Investment in these proposed systems is expected to have a payback of 2.6 years and save 190,000 equivalent barrels of fuel oil annually.

	1980	1981
Energy Monitoring and Control System, Oak Ridge National Laboratory, Oak Ridge, Tennessee......	$ ...	$4,000

This project provides for a system for monitoring and controlling energy consuming systems, such as heating, ventilating, and air conditioning (HVAC), with sensors of various types located at the points to be monitored. Sensor data will be transmitted to a central location which will have the capability of issuing commands to make real-time adjustments to various system parameters with response occurring immediately. A combination of hardware and software will permit simultaneous data acquisition, output printing and operator communication. Investment in the proposed system is expected to have a payback of 4.5 years and save 50,000 equivalent barrels of fuel oil annually.

	1980	1981
HVAC Heat Recovery and Night Setback, Richland, Washington.....	$ ...	$3,000

This project will provide modifications to the heating, ventilating, and air conditioning (HVAC) systems of selected buildings to reduce energy consumption. These modifications will utilize various heat recovery techniques and recirculate clean air in order to effect energy consumption reductions. Since most HVAC systems for the buildings involved are systems which utilize 100 percent outside air and operate 24 hours a day, significant amounts of heat are exhausted to the atmosphere. This project will recover much of the wasted heat to preheat the building makeup air and reuse air already conditioned by recirculation where feasible. Energy used for HVAC is a major portion of total energy use (25 percent). Calculations indicate that a payback of 5.3 years and an energy saving of 25,000 equivalent barrels of fuel oil annually can be realized.

	1980	1981
Automated Energy Management System, Argonne National Laboratory, Argonne, Illinois	$ ...	$3,800

This project provides for a complete system for monitoring and controlling energy consuming systems, such as heating, ventilating, and air conditioning (HVAC), with sensors of various types located at the points to be monitored. Sensor data will be transmitted to a central location which will have the capability of issuing commands to make real-time adjustments to various system parameters with response occuring immediately. A combination of hardware and software will permit simultaneous data acquisition, output printing and operator communication. Investment in the proposed system is expected to have a payback of 5.9 years and savings of 35,000 equivalent barrels of fuel oil annually.

	1980	1981
Alternate Energy Source, Pantex Plant, Amarillo, Texas.........	$ ... c/	$9,000

This project will provide a new coal-fired steam plant and a new underground hot water distribution system to supply the building heating requirements of the Pantex Plant, near Amarillo, Texas. This project will replace the existing natural gas-fired steam plant and distribution system. The new plant will be designed to burn low sulfur coal and will include provision for cogeneration of 4,000 kilowatts of electric power. The project will save 540 million cubic feet of natural gas.

a/ Includes $9,000,000 supplemental for fuel conversion projects.
b/ Includes $4,850,000 supplemental for fuel conversion projects.
c/ Does not include $3,300,000 for FY 1980 supplemental.

Mr. DINGELL. Mr. Athy?

Mr. ATHY. I have one question which you may respond to in writing for the record.

What additional conservation measures beyond those required by the HUD minimum property standards are required by BEPS? What is the additional cost to the builder of those standards? If both are on a life-cycle cost basis, why is it that BEPS should cost more if you demonstrate it does?

Are the BEPS standards for commercial building done on a life-cycle cost?

[The following response was received for the record:]

DOE BUILDING ENERGY PERFORMANCE STANDARDS (BEPS) AND HOW THEY COMPARE TO THE HUD MINIMUM PROPERTY STANDARDS (MPS)

The HUD MPS are approximately 20 percent more energy conserving than current residential practice. Depending on fuel type and climatic conditions, BEPS is 20 percent more stringent than the MPS or 40 percent more stringent than current practice.

Builders reach the BEPS by trading off investments in the shell, equipment efficiency, and hot water. Unlike the MPS, which is a prescriptive standard, the BEPS does not prescribe specific conservation features but gives a whole building target in BTU/square foot/year.

It is estimated that BEPS adds $0.75 to $1.00/square foot (or 3 percent) in first cost over current practice. The cost differential from MPS is not known.

The BEPS residential budgets were developed on a life cycle cost with recent fuel prices. These high fuel prices make conservation over and above MPS a good investment to both the Nation and consumers. The added first costs payback to the consumer in 3 to 5 years.

Mr. DINGELL. The Chair will recognize minority counsel.

Mr. BOLAND. Thank you, Mr. Chairman.

I have a couple questions on BEPS as well, but before we get to that, I wanted to ask one question about the $50 million advertising campaign to promote energy conservation. In the longer statement which you submitted to this subcommittee it says:

> In 1980, the Department will air 24 new television and radio spots and will publish 12 new ads in national and local print media. Altogether these ads will reach an estimated 75 million Americans at least once. The Department will distribute approximately 25 million pieces of free literature including pamphlets, manuals, and reports of all types. The Department will conduct about 13,500 training sessions on conservation subjects that will reach about 325,000 people. These efforts are to be continued and strengthened in fiscal year 1981, and a major energy information campaign will be added.

How do you project the net effect of this big advertising blitz? Do you have figures which say for each dollar spent on advertising conservation there is a similar amount of dollars that are saved in terms of people switching fuels, switching to more efficient appliances, building houses in more efficient ways, planning their energy use in some other way?

Mr. STELSON. Generally, I think the answer to that is yes, and we have really just recently got the first good hard information on a program that was evaluated, and it is the one I mentioned earlier, no cost/low cost, which was in New England, and Mr. Barrow here was the director of that program, and perhaps you would like him to describe it briefly.

Mr. BOLAND. I am not talking about specific conservation programs right here. I am talking about the advertising campaign.

Mr. **Stelson**. That is what I am talking about, too. He was in charge of the advertising campaign for which we have performance information.

Mr. **Barrow**. We were very pleased about the low-cost/no-cost program in New England. One of the benefits is that it included the distribution of these low-cost/no-cost energy saver brochures to 4½ million households in the New England area, and a $1 million paid advertising campaign as an integral part of the program. The purpose of the advertising was to indicate to consumers in the six New England States that they could save up to 25 percent of the energy bill by practicing low-cost/no-cost conservation techniques. The impacts that Dr. Stelson testified to earlier are that for every dollar DOE spent on this program, which was $2.6 million, we had a return on investment of $26. That is $69 million saved in New England per year, based on the manner in which DOE marketed and implemented the program.

Mr. **Boland**. That is a direct result of your advertising campaign?

Mr. **Barrow**. The advertising and marketing aspects of this campaign; that is correct.

Mr. **Boland**. In other words, for every dollar you spent advertising the low-cost/no-cost program, you had $26 being invested in that program by someone, spurred on by the advertising?

Mr. **Barrow**. For every $1 we spent—the $2.6 million we spent in the program—based on the estimated energy savings that we predicted from testing and evaluating this program, there was a $26 return, $69 million a year in the six New England States, based on what people did as a result of this program.

Mr. **Stelson**. This is fuel saving this year.

Mr. **Boland**. A direct result of this program, not a result of the price of energy or the weather being warmer, or anything else.

Mr. **Barrow**. As a direct result of this program, we estimate that the savings in the New England States amounts to $69 million over a year, and divided by the program cost of $2.6 million, that is where we calculated the return on investment of approximately $26 for every $1 we spent.

In addition to that, we estimate that there is 2.6 million barrels of oil equivalent per year saved as a direct result of this program.

Mr. **Boland**. Can you supply that information?

Mr. **Barrow**. We can supply more detail for the record.

[Testimony resumes on p. 268.]

[The following information was received for the record:]

LOW COST/NO COST
ENERGY SAVERS PROGRAM

The Low Cost/No Cost program was developed to inform New England homeowners of eleven inexpensive actions that can be taken to save up to 25 percent on residential energy bills.

During the month of November 1979, the Department of Energy conducted the Low Cost/No Cost program in Massachusetts, Vermont, Connecticut, Rhode Island, Maine and New Hampshire. The program was intended to motivate consumers to take the recommended Low Cost/No Cost actions which will save energy and help to control rising energy costs. The $2.6 million program consisted of a strong multimedia marketing effort with the following components:

- an integrated $1 million paid advertising campaign including television, radio and print (approximately 90 percent of the population was reached during the Low Cost/No Cost campaign);
- direct distribution through the U.S. Postal Service to 4.5 million New England households of the Low Cost/No Cost Energy Savers brochure and a water flow controller for use in the shower;
- strong public awareness support, including press conferences with Governors in each of the six states, television and radio public affairs talk shows, and print articles and editorials.

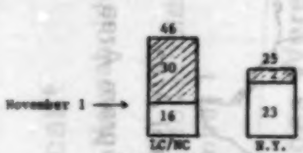
The program was developed by the DOE last spring in response to the low levels of heating oil stock and the likelihood of higher home energy prices. The six New England States were chosen to test the program because of the region's heavy dependence on heating oil and severe winter weather. If the eleven Low Cost/No Cost actions referred to in the brochure are followed, households can save an average of 25 percent of their home energy bill; yet, all the actions can be taken for less than $100 and some can be done without any cost.

To determine the effectiveness of the program, the Low Cost/No Cost program was evaluated in December using:

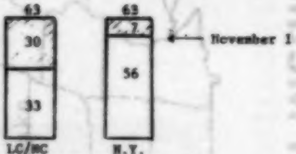
- a telephone survey of 1,200 single-family New England households compared with a control group of 600 Western New York State households;
- a day-after-recall measure to determine memorability of the television advertisements; and
- a television panel and diary with questionnaire follow-up to measure impact of advertising on Low Cost/No Cost conservation actions taken.

The Low Cost/No Cost integrated marketing campaign was very successful. As a direct result of the Low Cost/No Cost program, the percentage of water flow controllers installed in New England increased 28 percent as compared to the increase in the New York control group. In addition, there was a 20 percent increase in the number of New England households making furnace efficiency modifications during November, a 27 percent increase in checking fireplace leaks, and a 2 percent increase in insulation of duct work as compared to increases in the control group.

According to strict research methodology, only savings from these four actions, which are measured as "statistically significant," can be attributed directly to the Low Cost/No Cost program. However, positive increases were measured in New England on the other actions. For example, since November there was a 30 percent increase in setbacks of water heater thermostats and a 44 percent increase in checking for outside leaks. These increases are not viewed as "statistically significant" because the New York control had an initial head start on these actions, and while the Low Cost/No Cost program brought New England up to a level equal with the control, it did not produce additional "significant" increases. In other words, where the New York control began 23 percent higher than New England (as in the case of setbacks of water heater thermostats), a 30 percent Low Cost/No Cost program increase in New England during November did not result in a total percentage increase beyond New York.



% FLOW CONTROLLER INSTALLED
STATISTICALLY SIGNIFICANT
28% INCREASE

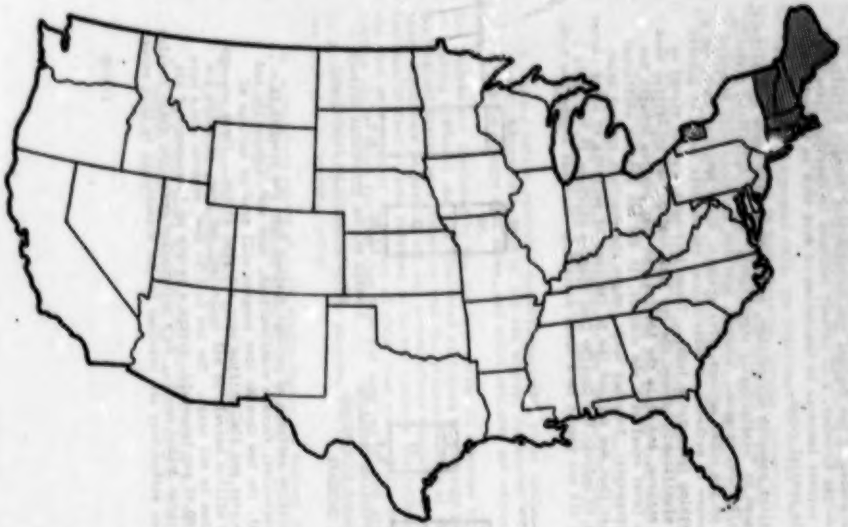


% WATER HEATER THERMOSTAT SETBACK
NOT STATISTICALLY SIGNIFICANT

Using the conservative estimate of savings derived from the program (i.e., only the flow controller, furnace modifications, duct work insulation and fireplace blocks), the Low Cost/No Cost program will produce savings of $69 million this year and $345 million over a 5-year period. These savings are equal to 2.6 million barrels of oil equivalent per year, of which 1.6 is direct reduction in oil usage. The Low Cost/No Cost program costs were $2.6 million or $0.58 per household, giving a return on investment of $26 for every DOE program dollar spent. More information regarding these results and the evaluation methodology are provided in the attachments to this paper.

2/6/80

Evaluation Methodology



▨ Upper New York Control Area

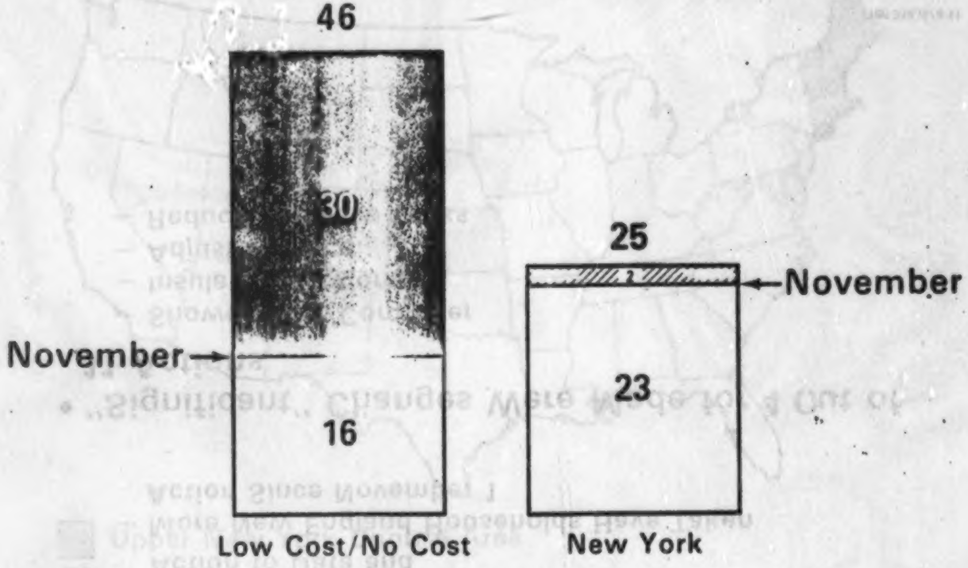
▩ Low Cost/No Cost Program Area

FT80-21438/2-11

- **Statistically Significant**
  - More New England Households Have Taken Action to Date and
  - More New England Households Have Taken Action Since November 1

- **"Significant" Changes Were Made for 4 Out of 11 Actions**
  - Shower Flow Controller
  - Insulate Ductwork
  - Adjust Furnace
  - Reduce Fireplace Leaks

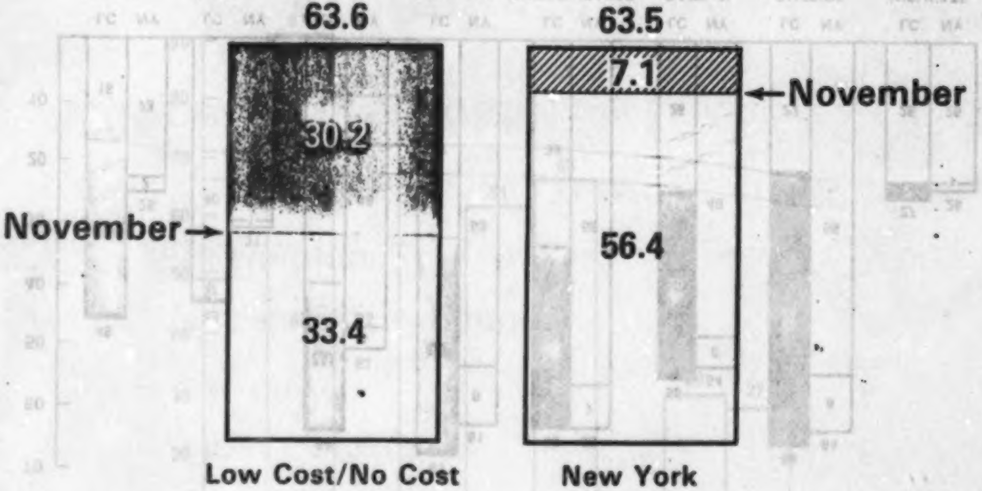
Shower Flow Controllers Installed (%)



Increased 28%

FT80-21439 4 11

Positive Impact on the Seven Other Actions



Lower Water Heater Thermostat (%)

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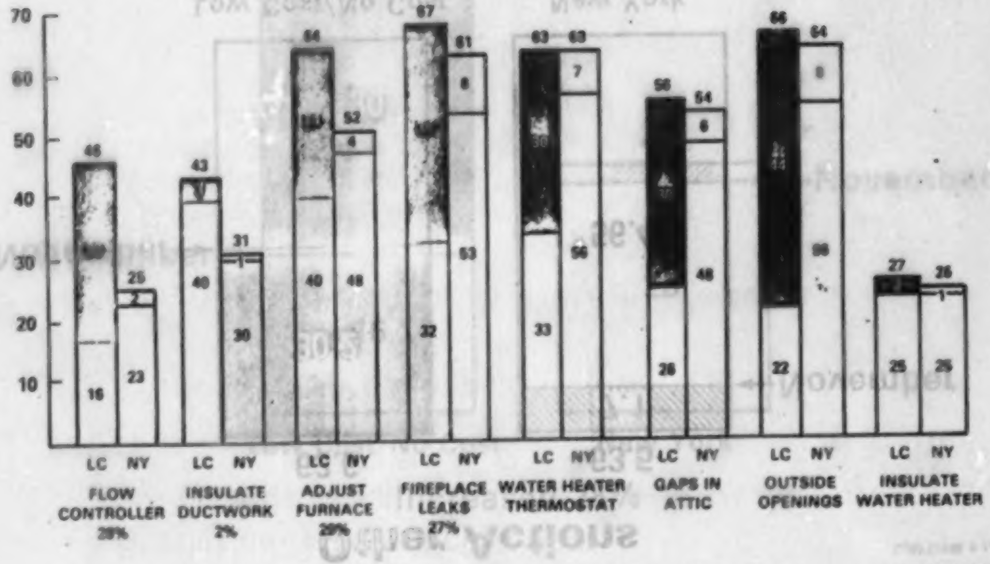
LOW COST/NO COST EVALUATION SURVEY RESULTS



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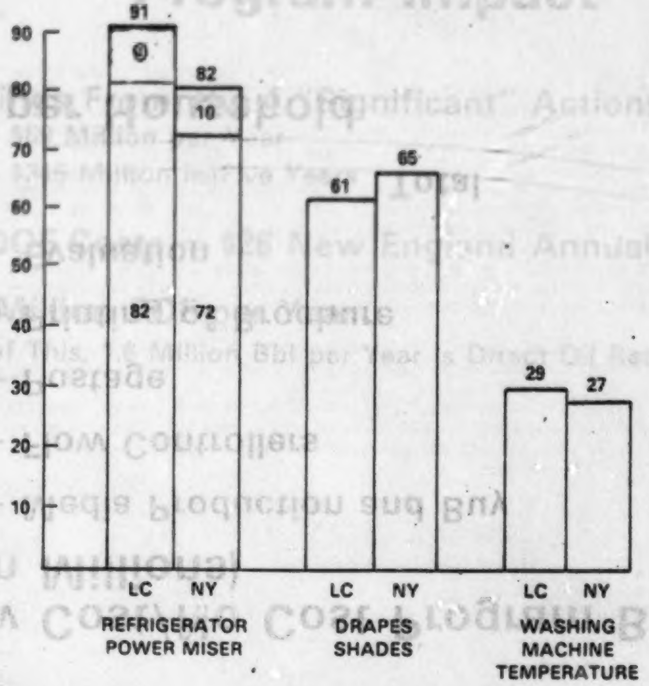
LOW COST/NO COST EVALUATION SURVEY RESULTS



FT80-21484 2-2

- Low Cost/No Cost Program Budget ($ in Millions)

— Media Production and Buy	$1.2
— Flow Controllers	.6
— Postage	.4
— Printing of Brochure	.3
— Evaluation	.1
Total	$2.6

- 58¢ per Household

FT80-21439/8-11

Low Cost/No Cost Program Impact

- Savings From the 4 "Significant" Actions
  - $69 Million per Year
  - $345 Million in Five Years
- $1 DOE Costs = $26 New England Annual Savings
- 2.6 Million BOE per Year

  (of This, 1.6 Million Bbl per Year Is Direct Oil Reduction)

EDITORIAL COMMENTS

- "Free advice is often worth just what you pay for it. But in this case it should be far different. Our hat is off to those who put together this Low-Cost, No-Cost program. Now it's up to you to use it." Radio Editorial, Boston

- "This mass mailing is one of the best uses of taxpayer's money we've seen in a long time, and we hope you take advantage of it." Radio Editorial, Boston

- "The booklet is simple to comprehend, and most of the tips on energy savings can be accomplished with a minimum of expertise on a single weekend. It sould be a "game" the whole family can enjoy and become involved in." Reading,MA Newsclip

- "...we frankly don't care what President Carter's ulterior motives might be. The DOE's so-called "low cost/no cost" conservation campaign is still a good idea and we hope it succeeds well enough in New England to justify its expansion throughout the country. We doubt that the public will be carried away with gratitude for Jimmy Carter at primary time just because they received care packages from the DOE. They're smarter than that. On the other hand, it's nice to see something positive being done on the conservation front. And if Jimmy Carter derives some political benefit from it, well, then, we won't begrudge it". West Lebanon, NH Newsclip

EVALUATION PROCESS

Survey With Control Group

LC/NC - New England N = 1,207
Control - New York N = 600

Northwestern N.Y. counties chosen because:

- Similar to New England in:
  - Climate
  - Oil dependency (56.8% of heating units are oil in N.Y. state)
  - Housing types
  - Urban/rural distribution
  - Socioeconomic mix.
- Beyond media reach of LC/NC program

Counties selected:

- Erie
- Genessee
- Livingston
- Monroe
- Niagra
- Orleans
- Wyoming

Day After Recall

New England N = 300

TV Panel and Diary With Questionnaire Follow-up

New England N = 200 households completed adult TV watching diaries for November 8 - December 2

N = 100 of these completed LC/NC questionnaires

ENERGY AND DOLLAR SAVINGS
CALCULATIONS, ASSUMPTIONS, CONVERSIONS

Calculation Procedures

- Choose tips with both overall and since November significant differences between New England and control.
- Subtract percent control doing tip since November from percent New England doing tip since November.
- Multiply remainder by number of single family or single family and multifamily households in New England to get extrapolated number who did tip.
- Proportion extrapolated number according to heating fuel use distribution.
- Multiply by estimated annual energy savings per household for tip and fuel type.
- Determine oil savings from electricity by considering generation mix.
- Calculate dollar savings using recent prices.
- Convert to barrel of oil equivalents, Btu's etc. using standard conversions.

Fuel for Heating in Northeast - Natural Gas 35%; Fuel Oil 50%; Electricity 11%[1]

Annual Energy Savings per Household Estimated[2]

	Electric (kWh)	Natural Gas (Therms)	Oil (Gal)
Shower Flow Controller	750	35	-
Reduce Hot Water Temperature	350	25	-
Low Temperature Laundry	600	50	-
Insulate Water Heater	350	24	-
Refrig. Anti-Sweat	120		
Furnace Tuneup		220	157
Night Thermostat Set Back Heating	5,500	320	230
Plug Fireplace Flue	900	60	43
Seal Bypasses to Attic	1,400	80	57
Insulate Ducts	1,900	130	93
Seal Outside Openings	1,500	100	71

Numbers of Households

New England	- Single Family & Multifamily	4.5 million
	Single Family Only	2.4 million
Oil Tier	- Single Family & Multifamily	27.2
	Single Family Only	15.4
U.S.	- Single Family & Multifamily	50
	Single Family Only	27

Conversions

10.350 Btu/kWh (at plant)
5.8 million Btu/bbl
.18 bbl/MCF

Generation Mix

In New England based on July 1979 figures, yielded conversion of .00109 kWh saved = bbl saved[3]

Prices of Energy

Oil $27.45/bbl January 1, 1980, weighted average international price of oil[4]
Gas $4.50/MCF[5]

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[1] Howard Ross, BCS; from 1977 HUD Census.

[2] Howard Ross, BCS; assuming a 1200 ft^2 house, R-11 in ceiling, R-7 in walls, 6,000 heating degree days/yr (Chicago-Boston), Furnace efficiency 50%

[3] 1979, Summary of Projected Peak Load, Generating Capability and Fossil Fuel Requirements, National Electric Reliability Council, July 1979.

[4] DOE Weekly Petroleum Status Report, January 25, 1980.

[5] AGA Statistical Computation, 1978.

Mr. **Stelson**. I think the thing you also would be interested in knowing is that there was a control area in upper New York State with similar climate and conditions, where the campaign was not put into effect. It was a good basis for evaluating the effect of things like rising fuel costs, and that was completely discounted from these achievements.

Mr. **Boland**. There have been private studies completed by the Dow Chemical Co., which is interested in this because it produces styrofoam and other insulation products; and they did a marketing survey for their product which showed high sensitivity among the people in the market they are talking about, at all income levels, all the way down to the people who were normally affected by things like the weatherization program, and one of the concerns of the members of this committee is how much is the Government duplicating what is already being done in other sectors. There seems to be a great deal of cross-referencing of one program to another.

While people might have a lot of sensitivity that saving energy in many ways can save them money, it is not necessarily a direct result of one specific advertising campaign. What we would be interested in is how you go about determining whether it was your campaign or someone else's campaign, the price, or weather, or one thing or the other. For example, the Dow study showed something like 80 percent of the people realized that certain investments, as much as $800, in their home would pay them back within 3 to 6 years. How much more did they need to be told that through an advertising campaign?

Mr. **Barrow**. We have been doing research in this area for the last 2½ years, in determining what consumer attitudes are toward energy conservation and relating it to their actual actions. We are finding that even though consumers in certain parts of the country have greater knowledge of conservation and its benefits, that they are not taking the actions. Some of the reasons they are not taking those actions is that they do not know exactly what to do and how to do it. That is what this low-cost/no-cost program did, was focus specifically on what consumers could do and what the economic benefits were, and research tells us that if you are more specific and provide the information in an aggressive manner, you can stimulate specific action, and I think that is what our last 2½ years of research has really boiled down to, as exemplified in the New England program.

Clearly, there are lots of things that motivate consumers and, although advertising and marketing efforts we can now point to can contribute to those actions, obviously price, weather, all those things, taken into account, motivate consumers or create a market environment to which consumers can react.

So we can point to you how our efforts will complement what is going on in the marketplace, and if you will take advantage of what is going on in the marketplace, we can really provide it to the consumers in such a way it forces them to take action.

Mr. **Boland**. Mr. Chairman, I would ask that the Dow Chemical study on the very same market conservation for conserving purposes be inserted in the record.

Mr. **Dingell**. Without objection it is so ordered.

[Testimony resumes on p. 293.]

[The material referred to follows:]

A national study commissioned by The Dow Chemical Company, manufacturer of Styrofoam* TG brand insulation.

For further information contact:

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FOR RELEASE--January 18, 1980

HIGH ENERGY BILLS FOUND EVERYWHERE,
BUT SO ARE EFFORTS TO CONSERVE

You can run, but you can't hide from high energy bills.

A national study commissioned by The Dow Chemical Company, manufacturer of Styrofoam TG brand insulation, has revealed that homeowners throughout the country are feeling the sting of rising fuel costs.

The average Southerner interviewed reported spending $1,200 to heat and cool his home during the year prior to the study -- only a few dollars less than the $1,210 average reported by Northeast residents.

The average Boston resident, spending $1,290 to heat and cool his home, might expect relief from high fuel bills should he move to sunny Florida. But the average Jacksonville resident said he spent $1,200 for energy annually.

"Whether it's because of high cost for the prevalent type of fuel in an area such as oil in Boston, or because of the air-conditioning costs in the South, Americans are finding more and more of their household budgets being spent for energy," said Thomas D. McGivern, product sales manager for Styrofoam brand products at Dow. "And homeowners don't expect things to get any better."

- more -

The Dow study last fall of homeowner attitudes about energy and the home -- possibly the largest survey of its kind -- consisted of nearly 3,000 interviews, including a nationally representative sample plus interviews drawn from 30 cities.

The study showed that homeowners anticipate their fuel bills to have gone up anywhere from a low of 50 percent in the West up to 67 percent in the Northeast during the two-year period ending in fall 1980. Nationally, the average was 53 percent.

Even in Northwestern cities, such as Portland and Seattle, which have relatively low costs, homeowners are upset about their fuel bills. In both of these cities, 96 percent of homeowners said they had been affected to some extent by escalating energy bills, even though Seattle residents reported spending only an average of $535 annually and Portland residents only $620 annually to heat and cool their homes.

"These homeowners' concerns about energy costs in their current homes have made them very aware of the importance of energy-saving features in new homes," said McGivern.

Nationally, an overwhelming number (95 percent) of homeowners said they felt energy-saving features are an important factor in the purchase of a new home. But even this high figure was surpassed by respondents in cities as different as Dallas and Cleveland where 100 percent said energy savers are important.

Homeowners were asked how much they would spend for a comprehensive insulation package that could save them 25 percent on annual home heating and

- more -

cooling costs. Those saying they would spend the most for such a package were from New York City and Charlotte, N.C. Homeowners from these cities making an estimate said they would spend an average of $1,740 for such a package, compared to an average $1,360 nationally. Respondents from Portland, Stamford, Tallahassee and Cincinnati all said they would spend about $1,500, well above the national average. The least anyone would spend was $660, by Birmingham respondents.

"A package that could meet all their requirements might consist of glass fiber insulation in the ceilings and walls and Styrofoam TG brand insulation installed as a sheathing on the exterior walls from roofline to frostline (three feet below grade). Tests and calculations by Dow have shown that Styrofoam brand insulation alone in this package can save up to 24 percent on home heating bills," said McGivern. "Homeowners' estimates on what they would spend would more than adequately cover the expense for this total package."

He said actual savings may vary depending upon local fuel costs, equipment efficiency, climate, house design, workmanship and thermostat setting, as well as the number of people living in the house and their living habits. Styrofoam brand insulation is combustible and should be installed according to manufacturer's recommendations, including half-inch drywall interior finish for residential construction.

"Despite regional and local differences, the study showed that Americans are concerned about energy costs," said McGivern. "They expect the new homes they buy to be as energy efficient as possible."

# # #

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Nationally, homeowners willing to make an estimate said they would spend an average of $1,360 for a comprehensive insulation package that would save them 25 percent on home heating and cooling costs, according to a study commissioned by The Dow Chemical Company.

Such a package might consist of glass fiber batts in the ceilings and walls and Styrofoam TG brand insulation, manufactured by Dow, applied to the exterior walls from roofline to frostline.

Throughout the country, homeowners said they would be willing to spend substantial amounts for this sort of energy-saving package.

# # #

A national study commissioned by The Dow Chemical Company,
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FOR RELEASE -- January 18, 1980

SURVEY SHOWS HOMEOWNERS RECOGNIZE, REACT TO HOME ENERGY PROBLEMS

A majority of homeowners nationwide recognize their homes waste energy and have reacted by taking conservation measures to hold down energy costs.

In a national study on home energy issues commissioned by The Dow Chemical Company, it was learned that 63 percent of U.S. homeowners admitted their homes could be more energy efficient. To these homeowners and others, 94 percent in all, home energy costs are a problem that has been counteracted by some energy-saving action in the 12 months prior to the study.

"The current energy situation is being taken quite seriously by a vast majority of Americans today. On an average, the typical homeowner took approximately four steps with the intent of reducing energy costs," said Michael Box, remodeling market manager at Dow.

The survey of homeowners, conducted during the fall of 1979 by Opinion Research Corporation, points out the most popular conservation measures undertaken were those that did not require major capital investments. More than three quarters (79 percent) of American homeowners lowered their winter thermostats; 55 percent added weather stripping and/or caulking; and another 51 percent lowered their water heater thermostat (or insulated it).

Improvements which upgraded the energy efficiency of major home heat loss areas (i.e., walls, attics, windows and doors), and which required a major capital expenditure, were not as popular with homeowners. Only 21 percent of all homeowners added insulation to their home's wall, basement or crawl space area. Slightly more homeowners (31 percent) installed attic insulation, and 39 percent added storm doors and/or windows.

"Inflation and a general lack of knowledge on how to economically invest the energy conservation dollar may be preventing homeowners from taking the most effective energy-saving action," notes Box at Dow.

This situation apparently will continue to exist for the next year or two. Among those homeowners planning to take some future conservation measure, most will make non-capital improvements. In fact, 86 percent of all homeowners indicated they were not planning to take further action to reduce home energy costs.

It is the owners of older, existing housing, however, who plan to undertake additional home improvement measures in the name of energy conservation more so than the owners of newer homes. In addition, owners of homes over 30 years old plan to take a greater number of steps in the next year or two. This situation exists despite the nearly identical owner perception of their home's energy efficiency.

"Owners of newer homes may be living with the false security that because their home was built in the 1950s or '60s it possesses adequate energy-efficient features. Research has shown, though, that many existing homes today are experiencing heat loss of which their owners are unaware," maintains Michael Box. "Furthermore, owners of older homes may have more opportunities to implement energy-saving actions in the future due to the greater general need for aesthetic improvements or remodeling in homes of this age."

Homeowners who are planning to insulate their homes in the near future expressed a willingness to spend an average of $547 for this purpose. If any of these homeowners are also planning to re-side their existing home, for example, they can add 3/4" Styrofoam* TG brand insulation under the new siding, spending less than the average investment indicated while upgrading their home's insulation protection.

Of those homeowners (22 percent) planning to add insulation, 65 percent singled out the attic area for improvement, and an equal number (38 percent) are willing to upgrade either the wall or basement/crawl space areas.

On the other hand, the survey disclosed that 51 percent of U.S. homeowners planning to add insulation had no idea how much they are willing to spend.

"Homeowner uncertainity of insulation costs appears to be a somewhat common occurence across the country," concludes Box from the survey findings. "It is expected that these same homeowners are probably unaware of the savings which can result from added insulation protection."

For example, Styrofoam brand insulation under new siding typically adds 20 percent to the cost of the standard re-siding project. Yet it can pay for itself in the form of reduced energy costs within five years time.

Payback time can vary depending on household lifestyle, climate, energy costs and existing building components. FTC rulings will soon require all sellers of insulation to provide product "R-value" information to consumers. R-value is a measure of a product's insulating ability. The higher the R-value, the greater the insulating power.

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*Trademark of The Dow Chemical Company

Offsetting consumer unawareness of insulation costs is a wide-ranging awareness of the Federal Energy Act tax credit for energy-saving improvements made to an existing home. Three-fourths of all homeowners surveyed were aware that the federal income tax credit is available.

IRS officials feel equally strong about consumer awareness of the tax credit. According to IRS figures, approximately six million Americans filed for the Energy Act tax credit on their 1978 income tax returns. Nearly $600 million in tax credit was claimed by those filing for an average return of about $100.

The tax credit can total up to $300 and is deducted directly from the annual income tax bill. After figuring his income tax for the past year, the homeowner simply subtracts 15 percent of the first $2,000 spent on qualifying energy-saving products from the total income tax to be paid. A special form (#5695) is used in addition to the regular income tax form. The form and information about which products qualify for tax credit can be obtained from the local IRS office.

Almost all energy-saving home improvements qualify for a tax credit, including Styrofoam brand insulation which is a combustible material and should be installed according to manufacturer's instructions.

In addition to the tax credit, most homeowners (83 percent) recognized that the addition of energy efficient features can increase the value of an existing home at re-sale time. This is consistent with a previous Dow Chemical/ Opinion Research survey in which 66 percent of real estate brokers and 78 percent of appraisers stated well-insulated homes are worth more at resale.

# \# \#

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Responses to home energy questions by The Dow Chemical Company indicate the areas where retrofit insulation has, or will be added to an existing home.

Of homeowners surveyed who plan to add insulation in the next year of so, and of those who did add insulation to their home, the attic was the most popular area for improving energy efficiency with an equal number of homeowners preferring wall and basement/crawl space areas.

Homeowners who are planning to insulate their homes in the near future expressed a willingness to spend an average of $547 for this purpose. If any of these homeowners are also planning to re-side their existing home, for example, they can add 3/4" Styrofoam TG brand insulation under the new siding, spending less than the average investment indicated while upgrading their home's insulation protection.

# # #

DOW

Information from Dow

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STYROFOAM* TG Brand Insulation

FACT SHEET

THE PRODUCT: STYROFOAM TG brand insulation is a rigid, extruded polystyrene foam, manufactured in board form and made only by The Dow Chemical Company.

The unique composition of STYROFOAM TG brand insulation -- millions of individual closed cells -- gives it remarkable properties. The boards are lightweight, strong and virtually impervious to water, therefore a most effective insulation material. The unique tongue and groove edges increase effectiveness by reducing air infiltration.

STYROFOAM brand insulation differs from other polystyrene foam insulation materials in a very important way. It is the only extruded polystyrene insulation made in the U.S. It has a tight, dense, closed-cell structure that sets it apart from molded polystyrene sold as insulation (beadboard) and as coffee cups, picnic coolers, float boards and cushion packaging.

THE USES: STYROFOAM brand plastic foam was developed by The Dow Chemical Company more than 30 years ago as a flotation material. Since that time it has proven to be an excellent insulation product.

In addition to its wide use as an insulation material in homes and apartments, it is also used in cold storage freezers and coolers, schools, churches, hospitals, offices and commercial structures.

INSTALLATION: In residential applications, boards of STYROFOAM TG brand insulating sheathing are nailed to the exterior side of stud walls and then covered with the customary siding materials. For maximum effectiveness the foam application is continued down the outside of the foundation wall to the frostline, thus insulating an area of major heat loss previously ignored.

NOTE: STYROFOAM brand insulation is combustible and must be properly installed according to instructions provided by The Dow Chemical Company. For residential construction, a minimum of ½-inch gypsum board interior finish is required.

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*Trademark of The Dow Chemical Company

DOW COMMUNICATIONS • DOW CHEMICAL U.S.A. • MIDLAND, MICHIGAN • 48640

A national study commissioned by The Dow Chemical Company,
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FOR RELEASE -- January 18, 1980

HARD-HIT HOMEOWNERS DEMAND ENERGY-EFFICIENT HOMES: DOW STUDY

Escalating energy costs are forcing America's homeowners to become energy smart.

They are determined to increase the energy efficiency of their current homes and would demand new homes they purchase to be energy efficient, according to a national study commissioned by The Dow Chemical Company.

The study, "Perspective On Energy: America's Homeowners Speak Out," believed to be the largest survey of homeowner attitudes about energy ever conducted, also indicated:

-- Homeowners overwhelmingly think energy-saving features are important in the purchase of a new home;

-- They would spend an average of well over $1,000 extra for a comprehensive insulation package in a new home;

-- While almost all have taken steps to reduce energy costs in their current homes, a majority still feel their homes could be more energy efficient; and

-- Most homeowners believe energy-efficient homes are worth more at resale than homes lacking such features.

Dow, manufacturer of Styrofoam TG brand insulation, commissioned the Opinion Research Corporation last fall to conduct nearly 3,000 in-depth, telephone interviews, with a nationally representative homeowner sample plus samples in 30 cities.

"With all the attention being paid to energy and the emphasis being placed on conservation efforts, we at Dow felt it was time to find out what the American homeowner is thinking and doing about the energy crisis," said Thomas D. McGivern, product sales manager for Styrofoam brand products at Dow.

Energy Costs

"Today's homeowners have been hard hit by rising fuel costs," said McGivern. "They report their energy bills have increased more than the overall increase in the cost of living."

Ninety-four percent of those surveyed said they had been affected to some extent by rising energy bills, with 45 percent saying they had been affected a great deal.*

The typical homeowner said he anticipated he would be spending $1,225 annually to heat and cool his home by fall 1980 — a 53 percent increase in just two years.

"As a result, American homeowners consider it reasonable to invest their money to make sure new homes they purchase as well as their present homes are energy efficient," said McGivern.

Energy Efficiency and the New Home

Nearly all homeowners (95 percent) consider energy-saving features an important factor in the purchase of a new home. They even ranked such features ahead of other options such as landscaping and wall-to-wall carpeting.

Top-rated features, considered very important to extremely important, were attic insulation (92 percent); wall insulation (90 percent); weather stripping/caulking (84 percent); storm windows and doors (84 percent); and basement insulation (70 percent), an area where 20 percent of a home's heat loss typically occurs.

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*Figures cited are from the national probability sample.

Nearly all (95 percent) said they would be willing to spend extra for a comprehensive insulation package that would save approximately 25 percent on annual heating and cooling bills.

Homeowners making an estimate said they would be willing to spend an average of $1,360 extra for an insulation package.

"Such a package might consist of glass fiber insulation in the ceilings and walls and Styrofoam TG brand insulation installed as a sheathing on the exterior walls from roofline to frostline (three feet below grade). Tests and calculations by Dow have shown that Styrofoam brand insulation alone in this package can save up to 24 percent on home heating bills," said McGivern. "Homeowners' estimates on what they would spend would more than adequately cover the cost of this total package."

He said actual savings may vary depending upon local fuel costs, equipment efficiency, climate, house design, workmanship and thermostat setting as well as the number of people living in the house and their living habits. Styrofoam brand insulation is combustible and should be installed according to manufacturer's recommendations, including half-inch drywall interior finish for residential construction.

Steps to Conserve

In addition to their energy-conscious views about new homes, American homeowners also have made an effort to save energy in their present homes.

An overwhelming number of homeowners (94 percent) said they had taken steps to save energy. The most popular ones were low-cost, do-it-yourself actions, such as adjusting the thermostat in winter (79 percent), adding weather stripping and caulking (31 percent) and insulating or lowering the temperature on the water heater (51 percent).

"Despite this flurry of activity, 69 percent still felt their homes could be more energy efficient," said McGivern.

He said other, possibly more expensive steps, may be in order next for homeowners to increase the energy efficiency of their homes. To make these improvements cost effective, homeowners can incorporate energy-saving measures into most typical remodeling projects. For example, a rigid insulating material such as Styrofoam TG brand insulation can be economically added during the standard residing job.

"This is a simple procedure. The insulating sheathing is nailed over the existing exterior wall and then covered with new siding and trim," said McGivern.

He noted that homeowners planning to add insulation to their current homes during the next year or two expect to spend an average of $547 on that improvement. If any of these existing homeowners are planning to add new siding, they could invest in 3/4" Styrofoam TG brand insulation to help reduce their home energy bills and would still pay less than the expected $547 figure, in most cases.

Resale Value

In addition to reduced fuel bills, most homeowners (83 percent) also recognized that well-insulated, energy-efficient homes may be worth more at resale than homes lacking such features. This is consistent with a previous Dow study in which 66 percent of real estate brokers and 78 percent of appraisers said well-insulated homes are worth more at resale. Brokers estimated that a well-insulated home could be worth an average of 9 percent more at resale; appraisers estimated a 5 percent resale bonus.

Outside Help Needed

Homeowners are looking for assistance in their fight against escalating energy costs.

While nearly every homeowner feels energy-saving features are important in homes built today, only 48 percent consider new homes to be more energy efficient than existing homes.

"They in effect,are demanding that the housing industry build energy-efficient homes," said McGovern. "We know that builders generally are doing more to make their homes energy efficient. Perhaps they need to make an extra effort to educate home buyers about their energy packages."

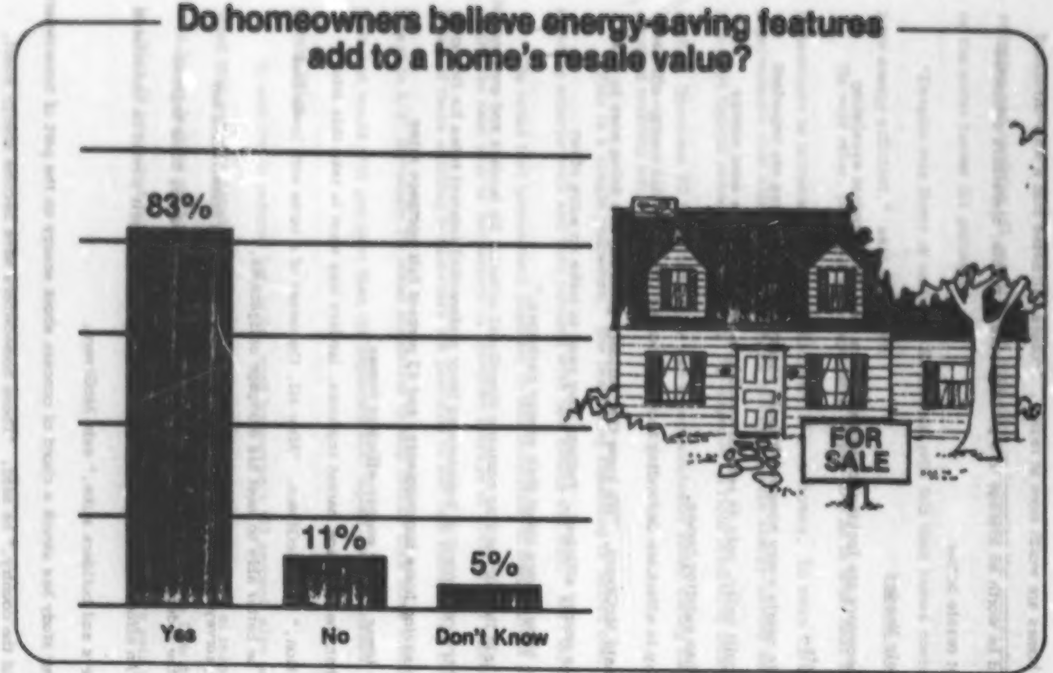
He said the survey also contains directional material for lenders and government.

Eighty-one percent of homeowners favor preferential interest rates for financing of energy-saving home improvements, and 63 percent felt mortgage rates should be lower on new energy-efficient homes.

"When the mortgage market improves, lenders may want to take this into consideration," said McGovern. "After all, the owner of a home with lower fuel bills will be better able to meet his mortgage obligations."

The survey revealed that nearly 75 percent of American homeowners are aware of the federal income tax credit available for energy-saving home improvements. "An effort to make more homeowners aware of the credit should be considered by suppliers and builders alike," said McGovern.

"Our study has struck a chord of concern about energy on the part of homeowners throughout the country," he said. "These homeowners have become energy smart. Even without direction from government or other sources they are determined to conserve and reduce their energy bills."



Do homeowners believe energy-saving features add to a home's resale value?

Source: The Dow Chemical Company

[illegible]

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Eighty-three percent of the homeowners interviewed in a national study commissioned by The Dow Chemical Company agreed that energy-saving features add to a home's resale value. This is consistent with a previous Dow study of real estate professionals in which 78 percent of appraisers and 66 percent of real estate brokers said that well-insulated homes are worth more at resale.

Dow is the manufacturer of Styrofoam TG brand insulation.

# # #

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FOR RELEASE -- January 18, 1980

AMERICANS DEMAND ENERGY EFFICIENCY IN NEW HOMES: DOW STUDY

Having learned a hard lesson about high fuel bills in their current homes, American homeowners are demanding energy-saving features in new homes, a national study commissioned by The Dow Chemical Company indicates.

Ninety-five percent of homeowners interviewed in a study conducted for Dow by the Opinion Research Corporation last fall said energy-saving features are a top priority in a new home.

"This is not surprising considering what today's homeowners have gone through with rising energy bills," said Thomas D. McGivern, product sales manager for Styrofoam brand products at Dow.

He noted that the Dow study shows that the typical American homeowner expects his household budget to have withstood a whopping 53 percent increase in home energy costs during the two-year period ending in fall 1980, for an average annual heating and cooling bill of $1,225.

When asked to rate a variety of features in homes, both energy savers as well as other options such as landscaping and fireplaces, respondents placed energy-conserving features at the top of the list.

Wall and attic insulation were considered the most vital of these features, rated very important to extremely important by more than 90 percent of the respondents. Basement insulation was rated as very important to extremely important by 70 percent, indicating a growing awareness of the need to insulate in this major area of heat loss, said McGivern.

"The study confirms that homebuyers consider insulation to be the foundation for home energy savings," he said. "And they're willing to pay extra to get a comprehensive insulation package, too."

Ninety-five percent said they would be willing to pay extra for a comprehensive insulation package that would save approximately 25 percent on annual heating and cooling costs.

Homeowners making an estimate said they would be willing to spend an average of $1,360 extra for an insulation package.

"Such a package might consist of glass fiber insulation in the ceilings and walls and Styrofoam TG brand insulation installed as a sheathing on the exterior walls from roofline to frostline (three feet below grade). Tests and calculations by Dow have shown this package can save up to 24 percent on home heating bills," said McGivern. "Homeowners' estimates on what they would spend would more than adequately cover the expense for this package."

He said actual savings may vary depending upon local fuel costs, equipment efficiency, climate, house design, workmanship and thermostat setting, as well as the number of people living in the house and their living habits. Styrofoam brand insulation is combustible and should be installed according to manufacturer's recommendations, including half-inch drywall interior finish for residential construction.

Regarding other energy savers, 84 percent of homeowners said weather stripping/caulking and storm door and storm windows were very important to extremely important.

Of the non-energy options, a family room was the top rated, considered very important to extremely important by 57 percent. This was followed by wall-to-wall carpeting, 56 percent; landscaping, 49 percent; central air conditioning, 48 percent; fireplace, 46 percent; dishwasher, 34 percent; patio, 25 percent; and garage door opener, 18 percent.

McGivern said this aspect of the study could be useful to builders designing homes, as well as to homebuyers, in comparing homes and choosing options.

"With the typical home mortgage lasting only seven years, the smart home buyer has to consider how marketable his home will be in the resale market," he said. "The survey shows energy-savers like insulation have to be emphasized."

In addition to saving money on fuel bills, most homeowners (83 percent) said energy-saving features add to a home's resale value. This is consistent with a previous Dow study in which 66 percent of real estate brokers and 78 percent of appraisers said well-insulated homes are worth more at resale.

The Dow study of homeowner attitudes about energy and the home -- possibly the largest survey of its kind -- consisted of nearly 3,000 interviews. There was a nationally representative study plus samples drawn from 30 cities.*

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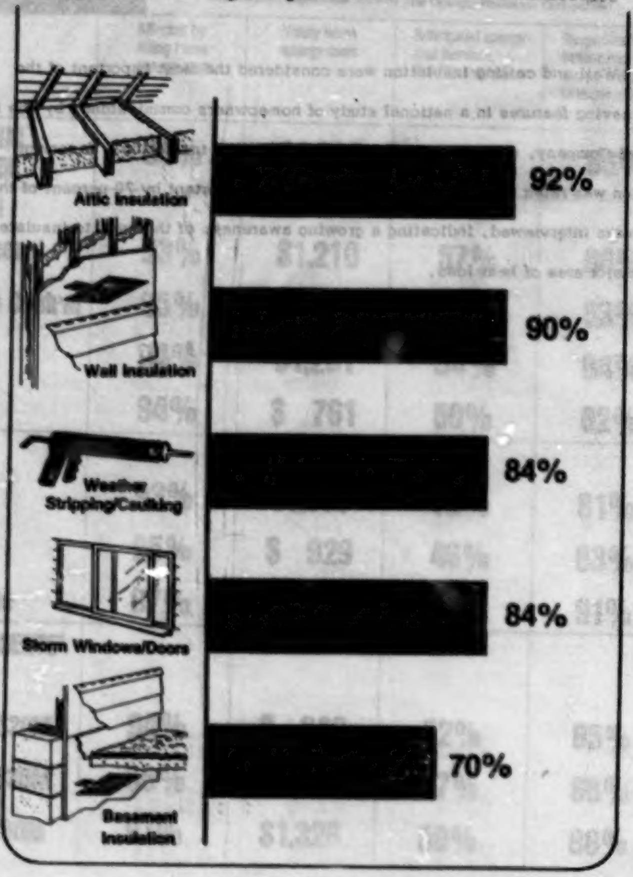
*Figures cited here are from the national sample.

Percentage of homeowners rating these energy-saving features as very/extremely important in a new home.



Source: The Dow Chemical Company

FROM: DANIEL J. EDELMAN, INC.
221 North LaSalle Street
Chicago, Illinois 60601
Contact: Howard Wolinsky or Andy Opila
312/368-0400

FOR: DOW CHEMICAL U.S.A.
2020 Dow Center
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Wall and ceiling insulation were considered the most important of the energy-saving features in a national study of homeowners commissioned by The Dow Chemical Company, manufacturer of Styrofoam TG brand insulation. Basement insulation was rated as very important to extremely important by 70 percent of the homeowners interviewed, indicating a growing awareness of the need to insulate in this major area of heat loss.

# # #

Perspective on Energy

America's Homeowners Speak Out

NATIONAL SURVEY SHOWS HOMEOWNERS HURT

A national survey of homeowners about home energy costs.
Sample: Approximately 3,000 homeowners, including a nationally-representative sample plus homeowners in each of 30 cities.
(Highlights below are from the nationally-representative survey.)
Commissioned by: The Dow Chemical Company
Conducted: September 1979 by The Opinion Research Corporation

	Affected by rising home energy costs	Yearly home energy costs	Anticipated energy cost increase, Fall '79-Fall '80	Respondents who believe energy-saving features add to resale value
NATIONAL AVERAGE	94%	$1,004	53%	83%
REGION				
Northeast	93%	$1,210	57%	84%
North Central	95%	$ 816	51%	83%
South	94%	$1,201	54%	84%
West	94%	$ 761	50%	82%
FUEL				
Oil	93%	$1,069	82%	81%
Gas	95%	$ 929	46%	83%
Electric	97%	$ 974	44%	91%
RESPONDENTS' INCOME				
$10 – $20M	94%	$ 842	52%	85%
$20 – $30M	96%	$ 880	47%	86%
Over $30M	91%	$1,326	58%	88%

Y ENERGY COSTS, FAVOR CONSERVATION STEPS

Respondents believing energy-saving [illegible] furnace important in new home	Respondents rating wall insulation extremely/very important in new home	Respondents rating basement insulation extremely/very important in new home	Average cost willing to pay for total insulation package in new home
95%	90%	70%	$1,362
97%	94%	80%	$1,147
97%	92%	77%	$1,529
94%	89%	64%	$1,203
91%	88%	61%	$1,490
96%	93%	78%	$1,355
95%	87%	66%	$1,344
93%	89%	60%	$1,552
94%	92%	69%	$1,333
99%	93%	77%	$1,537
98%	91%	68%	$1,411

Mr. **Boland**. On the BEPS program, one of the regulatory requirements that is in the proposed rule is the so-called weighting factor, which fuel will the building consume and, as I understand for electricity, there is a weighting factor of 2.79 as opposed to a natural gas factor of 1, which essentially is constant.

Is there anything that you can find in the Energy Conservation Protection Act which authorizes the Department of Energy to come up with weighting factors to discriminate as to which energy source a building consumes in developing the standards for the performance of that building, the design of the structure?

Mr. **Millhone**. Mr. Boland, when you are developing performance standards, you have the inherent question of determining how you will describe those standards and this is the problem that the Department of Energy faces.

It is possible to describe those standards only in terms of site energy used; that is, the energy used that moves over the building site, or it is possible to describe them as source energy used to look at the Btu's of energy that was taken from the ground and then eventually used at the building site.

There is no specific language in the legislation that indicates which of those or whether some other method should be used, but in dealing with this question it is inherent in coming up with the performance standards.

The approach that is taken in the proposed rule tries to get away from either the site or the source question and bases the numbers on what is called an economic weighting factor.

In doing this, we took the estimated cost of different fuel types in 1985 and then we added to the cost of oil and natural gas a premium which is reflected in Congress' preference for using coal and nuclear energy as represented in the Fuel Use Act.

The effect of that is to add $7.30 to the price of petroleum and a similar addition to the price of natural gas with the equivalent energy value. So we have taken the estimated 1985 prices and have added a weighting factor to that price that is favorable to coal and the use of nuclear energy and that has led to the figures that we are recommending.

Mr. **Boland**. So you would say the weighting factors favor coal and nuclear energy?

Mr. **Millhone**. The weighting factors favor the use of the electricity over what would otherwise be the price incentive alone.

In other words, if people were making that decision based solely upon price, then the decision would be not as favorable toward the use of coal or nuclear as it would be using the weighting factors.

Mr. **Boland**. Wouldn't there be an economic disincentive to use electricity in a building in a State such as Ohio where 98 percent of the electricity there is generated by coal? In other words, by taking a national average and these national weighting factors, then they get applied to the building performance standard that is implemented in Ohio. Assuming that implementation comes to pass, how would this work in Ohio?

Wouldn't you be discriminating against the use of electricity in a place like Ohio where it is all generated by coal?

Mr. **Millhone**. As you look at the actual application of the building energy performance standards and as more people do that, I think that the weighting factors will assume less controversy than has initially been the case.

In the course of the research that we did on BEPS when we looked at the buildings that would meet the standards in the different parts of the country using either the site base or the source base or the weighting base factor, we found that very few buildings changed from meeting the standards to not meeting or vice versa based upon the use of the weighting factor, so in answer to your question would this discriminate against the use of electricity in building in Ohio, it would discriminate less than the use of price in Ohio alone.

Mr. BOLAND. Do you foresee any changes in the weighting factors that the regulations will provide?

Mr. MILLHONE. We have identified the weighting factor issue as one of the most important issues to be considered before we develop the final standard.

One of our technical support documents deals expressly with that issue. We are encouraging comment on that question and, based upon our research, the comments that are received, and the statements that come in on the record, we will look at whether we should make a change or not.

Mr. BOLAND. Thank you, Mr. Chairman.

Mr. DINGELL. Gentlemen, we have kept you a long time. You have been very helpful to us. Thank you for your assistance to the committee.

The subcommittee will stand adjourned until the call of the Chair.

[Whereupon, at 12:35 p.m., the subcommittee was adjourned, to reconvene at the call of the Chair.]

FISCAL YEAR 1981 AUTHORIZATION FOR THE DEPARTMENT OF ENERGY AND THE FEDERAL ENERGY REGULATORY COMMISSION

TUESDAY, FEBRUARY 12, 1980

House of Representatives,
Subcommittee on Energy and Power,
Committee on Interstate and Foreign Commerce,
Washington, D.C.

The subcommittee met, pursuant to notice, at 9:30 a.m., in room 2123, Rayburn House Office Building, Hon. John D. Dingell, chairman, presiding.

Mr. Dingell. The subcommittee will come to order. The subcommittee is inquiring this morning into the 1981 budget for the strategic petroleum reserve. This legislation is one of the most important pieces of legislation we could put together to assure a measure of protection to the United States in the event of major loss of oil supply or catastrophic shutoff of oil supply.

The subcommittee has one basic question today. When will the SPR start buying oil? A year ago, when the subcommittee looked at the 1980 budget, the same question was asked. Regrettably, SPR has not acquired any new oil since November 1978.

In three separate hearings last year, the Department of Energy was unable to tell us when we could expect more oil. As recently as last Friday, Secretary Duncan testified before us that he "hoped" to start filling the reserve "very, very soon" but he too was unable to provide a date.

The subcommittee is a strong advocate of an effective strategic petroleum reserve. We are well aware of past problems but the SPR management has made substantial progress in correcting those problems. It has not addressed the question of continuing to supply that very essential national reserve.

In the past, construction costs doubled because of incomplete designs and estimates, inadequate cost controls and confused program direction. That is understandable in a program which is proceeding in great haste and in great difficulty.

Now, the SPR has become the authority on how to construct large-scale salt caverns for petroleum storage and is managing its program more effectively.

But in the 15 months since the SPR stopped buying oil, the cost of oil has doubled. In December 1978, the estimates for the program were about $22 billion. Now, the budget estimates project the costs will reach $40 billion. This time, the cost increases are due to higher oil prices.

There are a number of ways the SPR could begin oil fill. Early last year we suggested options such as taking royalty oil in kind, using the naval petroleum reserve or making direct acquisitions on a government-to-government basis. The Department of Energy has told us these options are under active consideration, along with others. That was in June. Still, no decision has been made.

When the Iranian crisis began, we raised questions about the SPR's inability to withdraw oil. A temporary and later a permanent withdrawal system were added. Last November we approved an amendment to the SPR plan for the distribution of SPR oil. Right now, there are 160 million barrels of empty caverns waiting for oil. The time to start filling has long since passed. The cost of delay is enormous and I believe intolerable.

The subcommittee hopes our witnesses this morning will tell us when we can expect the oil program to commence its acquisition and its filling. I believe that the national security requires this should commence at the earliest moment.

Mrs. Davis, we are happy to welcome you to the committee. We regret the tone of the opening statement, but I am keenly aware of the fact that you are equally aware that, although we have a lot of empty caverns, we have no oil and I am not sure we have plans for the filling of those caverns.

We look with great interest to your telling us what you are going to do to resolve the questions we find so troublesome.

STATEMENT OF RUTH M. DAVIS, ASSISTANT SECRETARY FOR RESOURCE APPLICATIONS, DEPARTMENT OF ENERGY, ACCOMPANIED BY HARRY A. JONES, DEPUTY ASSISTANT SECRETARY, STRATEGIC PETROLEUM RESERVE, DONALD W. MAZUR, PROGRAM PROJECT MANAGER, WILLIAM R. VOIGT, JR., DIRECTOR, URANIUM RESOURCES AND ENRICHMENT, AND DR. STANLEY WEISS, DEPUTY ASSISTANT SECRETARY, INDUSTRIAL AND UTILITY APPLICATIONS AND OPERATION

Mrs. DAVIS. Thank you, Mr. Chairman. I am accompanied today, as you know, by Mr. Jones, who is the Deputy Assistant Secretary for the strategic petroleum reserve on my left and, Don Mazur, project manager for the program.

I have a prepared statement and with your permission, I will ask that it be inserted into the record.

Mr. DINGELL. Without objection, your full statement will be inserted in the record. [See p. 301.] We will recognize you for summary and the questions which were directed to you will also be inserted in the record at the appropriate place. [See p. 355.]

Mrs. DAVIS. That was going to be my next request. Then, I would like to make a few selected comments if I might, on the program, including addressing as one of those points your discussion on acquisition and filling.

First, I would like to point out what I consider to be the very healthy state of the strategic petroleum reserve facilities and their capabilities. As this committee knows, phase I was to have 248 million barrels of storage capacity and five sites, and I can report that phase I construction and facilities are essentially complete.

As of September 30 of this year, we had a drawdown capability of 1 million barrels a day at the three sites which had oil. And, as you know, we have 91.7 million barrels on those three sites.

We did start on phase II. Phase II consists of expansion of two of those sites of phase I, namely Bryan Mound and West Hackberry and we are increasing the capacity at Bryan Mound by 120 million barrels and at West Hackberry by 160 million barrels.

The salt caverns there are going to be leached and filled with oil in phased increments. I am pleased to report that the phase II is underway. Its construction will continue until the phase II fill is completed. That will be 1986 under our proposed budget.

Phase III of the program was to carry us from the 500 million barrel limit of phase II to about 750 million barrels total. That entails creating of about 190 million more barrels of storage space.

I would report here that detailed plan is underway and that the final decisions as to the dates and the budgeting will occur during the fiscal year 1982 budget cycle, which is already underway.

I would now like to make a few comments on the management of SPR. I am glad to inform the committee that as of January this year my selection of Harry Jones as the Deputy Assistant Secretary of SPR became official and he is now in that position, as opposed to "Acting." He has been in the position since about last October.

In terms of the Department's management of SPR, I believe it has accommodated very well through the requirements of pursuing all aspects of proper activity simultaneously during its initial stages of development.

I would summarize what DOE is doing in management as follows: The concentration of policy reports for SPR is being handled by the Secretary in coordination with Deputy Secretary, Under Secretary, and myself, and with other appointed officials as appropriate.

The concentration of the management responsibility for the physical facilities and the capabilities of SPR is, I think, appropriately in a line organization of the Department of Energy where that very much needed stability of direction and continuity of management can be assured.

That means that SPR, as a line organization, reports to me as Assistant Secretary. The transition between the policymaking aspects, implementing of that policy which is my responsibility, and the handling of the physical plant and the line organizations of SPR, that transition function occurs in my office. And, I think it provides for the carrying out in a most responsive way of policymaking activities, of policy implementation activities and of the managing of SPR as an ongoing line organization.

My other comment on management is that this year we signed a contract with the Corps of Engineers who will provide us with professional, technical, and managerial services in an area in which they have what I believe, is unique competence.

I would like to now address the subject of acquisition of oil and the filling of SPR. I will not go over the history. You have stated that very well in your comments at the beginning of this session.

I would point out that we are in the very last stages of developing a domestic crude oil strategy and an implementation plan and that we have indeed discussed this at the Secretarial level.

I would also point out that as one of the very important aspects of looking at domestic acquisition of oil for filling SPR we have addressed use of naval petroleum reserve crude. As you know, the responsibility for the naval petroleum reserve also falls under my jurisdiction.

I would say that the ability to make a decision in that regard does not lie solely with the Department of Energy, that we have a commitment under the Tokyo Summit to discuss filling of any Government stockpiles with our allies. We have the obvious responsibility to discuss this with oil producing countries and we are responsible for coordinating with other parts of the Government.

I think Secretary Duncan was quite straightforward in saying that that process which has to be completed before a decision precludes our providing a date which is beyond our control. But, as he said, we expect that date to be soon.

I would point out that under the activities that we now have underway it is very apparent that from the naval petroleum reserves, we would be able to obtain about 75 percent of that capacity because 25 percent of the naval petroleum reserve is a set-aside for small refiners and would probably continue to be so set aside.

That would give us in round numbers about 100,000 barrels a day of naval petroleum reserve which could be, in some way, exchanged for equivalent oil to go into SPR.

We are now determining how to best do that, to make it the least expensive from a Government point of view and to determine its feasibility from a political and international point of view.

The acquisition of other than petroleum reserves, naval petroleum reserves, is also a very high intensive activity at the moment within the Department. Again, we are not able to decide without external agreements and the process for making that decision is underway. I can assure you that as soon as we can decide, we will inform the committee.

You will be able to tell from the comment that has been made and your budget submission that we expect to and want to start filling the SPR as soon as possible, and more specifically, in the first half of calendar year 1980.

I would like now to comment on distribution, more to insure you that the distribution plan for the SPR, as you mentioned, did become effective on November 13, and that it did detail the procedures for drawdown and distribution. Moreover the Economic Regulatory Administration—ERA—is now involved in rulemaking and is looking at several alternatives including open rulemaking where we want to provide within the Department the most flexible way of targeting SPR oil at special shortage problems and where we think that it probably is quite appropriate to have a separate rulemaking, a separate type of distribution mechanism or allocation procedure for SPR outside of the Department of Energy's existing regulatory programs.

The next area on which I would comment is our regional and noncontiguous petroleum reserve. As you know, the President announced last year that we would be developing 24.3 million barrels of regional and noncontiguous petroleum reserve and that that development was contingent upon the availability of financing through the windfall profit tax. We will be submitting funding requests and an SPR plan amendment for this function as soon as the windfall profit tax is enacted.

We are, however, already undertaking certain initiatives which I would report to you today. We have looked at a number of sites on the east coast. The Corps of Engineers has been doing some detailed studies involving both Federal and commercial property to handle the responsibilities of having a regional reserve in the northeast area.

We have also had teams looking at Puerto Rico and the Corps of Engineers has done some site inspection and is making recommendations for the third of those regional areas, namely Hawaii.

The last substantive area which I would like to discuss with the committee is operational readiness of SPR. Here we have been taking some important steps to insure not only ourselves and the Department of Energy, but to insure Congress as well as the public that the strategic petroleum reserve is an active ingredient in our emergency preparedness and I would report here that, as you know, with that 91.7 million barrels we have a drawdown capability and have had since September of 1 million barrels a day.

We have a fill rate we can sustain at 500,000 barrels a day. We can fill at the maximum rate of 675,000 barrels a day. We have done what I call a number of systems components at engineering tests to assure the various systems components at the sites for specific equipment and activity are operationally ready.

We have exercised our drawdown capabilities and during that exercise, we have moved as much as 7 million barrels of oil between sites and tanks in order to test the drawdown capability.

We have done these drawdown readiness tests in the period from August through January of this year.

We are also getting an approved operational readiness test. We have developed this kind of test because in any such facility which exists to be able to react for national security purposes and in emergencies mode the ability to be operationally ready to operate at any given time requires a lot of effort and testing, since it is not a system that is being exercised day to day.

Our response tests and our operational readiness test divide the kinds of testing that we will do in three areas. First, executive management or what I would call policy, involving the President, the National Security Council, Secretary of Energy, and other appropriate Cabinet level officials who will determine the policy, the need for drawdown and the purpose of the drawdown.

The second would involve the Department in the actions that would implement this policy decision, including the means of drawing down, the methods of sale or allocation of oil and the delivery schedules.

The third involves the operating readiness of the physical facilitie of SPR itself. And having completed a significant and adequate number of system components and site tests. I intend to have a SPR operational readiness exercise no later than April of this year and to have the full SPR operational readiness testing begin as an exercise before October of this calendar year.

In the few remaining moments I would like to turn to budget requests. I would simply point out what you have in the statement which is that we are requesting $103,978,000 in 1981. We are, in addition, requesting appropriation language to extend life of the SPR, 1979 appropriation indefinitely so that we can preclude the lapse of up to $2.3 billion in funds which might expire on December 31 under current law.

We are requesting language to allow the Secretary of Energy to use the funds available to him to finance SPR drawdown. We have enough funds now to do so. We will not have them in the future.

We are considering a reprograming request to reallocate $15 million of the phase II facility funds to phase I and to reallocate $2.4 million in oil funding to augment program direction.

Finally, as we have mentioned to you, following the enactment of the windfall profit tax, we will submit a funding proposal to start work on the regional and noncontiguous petroleum reserve.

In summary, I would point out that the progress in the physical plant, in management, in the beginning activities to formalize and to implement the regional and noncontiguous reserves and in beginning phase III activities, the SPR has been and is in a very strong position.

Its operational readiness, as I have attested to in emphasizing this, is something we can now exhibit, not only to ourselves but to the public in the near future.

The budget request, I think, is appropriate and adequate and I believe that the acquisition of oil for the SPR and the policy, the procedures that are necessary to start refill will be completed shortly.

That concludes my statement, Mr. Chairman. I will be very glad to answer any questions.

[Testimony resumes on p. 319.]

[Mrs. Davis' prepared statement follows:]

STATEMENT BY RUTH M. DAVIS, ASSISTANT SECRETARY, RESOURCE APPLICATIONS, DEPARTMENT OF ENERGY

I. INTRODUCTION

Mr. Chairman and Members of the Subcommittee, this is my first appearance before you and I am pleased to be here to discuss the Strategic Petroleum Reserve (SPR) Program.

I am accompanied by Mr. Harry A. Jones, Deputy Assistant Secretary for SPR and Mr. Donald W. Mazur, the Project Manager for the SPR.

You have asked in your letter of February 4, 1980, a number of questions. These are not included in my statement. The answers to these questions are being submitted separately.

My emphasis in this statement will be the major functions of the program, the major features of the SPR Program and supporting recent actions and the FY 1981 Budget.

II. MAJOR FUNCTIONS OF THE STRATEGIC PETROLEUM RESERVE PROGRAM

The major functions of the SPR are generally outlined in the Energy Policy and Conservation Act (EPCA) of 1975. From the point of view of our current energy situation, I consider the major functions of the SPR to be to provide for a large reserve to reduce U.S. vulnerability and to minimize disruptions in the world oil market.

The types of U.S. vulnerability I refer to are national security vulnerability, economic vulnerability and foreign policy vulnerability. For example, U.S. dependence on foreign oil supplies makes the U.S. vulnerable to attempts to use oil as a means to force changes in foreign policy positions.

The recent market disruptions resulting from the Iranian situation have rekindled concern about permanently driving up world oil prices during periods of shortages. It is desirable to restrain demand (or increase production) to reduce upward pressures on world oil prices during such periods.

This desire resulted in the Tokyo commitments last spring by major consuming nations to restrain imports. The U.S. committed to limiting net oil imports to no more than 8.5 million barrels per day. The nations also agreed to consult before purchasing oil for strategic stockpiles.

There also has been a concern that some countries may reduce oil production, thereby tightening the market and increasing prices.

In carrying out the SPR's functions there are nine major areas of activity in which we are concentrating our efforts. These activities include acquiring oil, improving SPR management, assessing SPR readiness status, implementing SPR operational readiness testing, providing for distribution, rulemaking, initiating plans for development of a Regional and Noncontiguous Petroleum Reserve, developing SPR physical facilities and capabilities and improving security.

III. MAJOR FEATURES OF THE SPR PROGRAM AND SUPPORTING RECENT ACTIONS

In this section, I will discuss the areas of major activities in the SPR Program which are currently underway.

A. Acquiring Oil

Due to the tight world crude oil supply situation, purchases of crude oil for the SPR were curtailed in 1979. The last shipment of SPR crude was received in August 1979.

The Department's objective is to fill the Reserve expeditiously within the constraints imposed by the tight world oil market. DOE also seeks to minimize the effects of SPR purchases on world oil prices and on the availability of supplies for domestic consumption. At the Tokyo Economic Summit in June 1979, it was agreed that the oil consuming nations would not buy oil for strategic stockpiles if it would place undue pressure on prices in the world market, and that the participating countries would consult regarding decisions to resume fill of strategic stockpiles.

One important action currently underway is the development of a domestic crude oil strategy and implementation plan. The first report outlining the strategy was completed January 9, 1980.

Current attention is being focused on one of the domestic oil acquisition strategies, that of utilizing Naval Petroleum Reserve crude for SPR. As Secretary Duncan indicated Friday, February 8, before this Subcommittee, decisions will be finalized later this month.

B. Improving SPR Management

Within DOE, responsibility for the SPR resided with the Assistant Secretary for Resource Applications until December, 1978. At that time, the Program was transferred to the Office of the Deputy Under Secretary. When Charles Duncan assumed the position of Secretary of Energy on August 24, 1979, DOE was reorganized. As a result of the DOE reorganization, the SPR Program once again reports to the Assistant Secretary for Resource Applications.

During 1979, significant improvements were made in the area of site management. These initiatives allowed for use of better construction techniques, a strong integrated systems engineering program, and an improved geotechnical program. Additional technical assistance was available from the U.S. Army Corps of Engineers.

(1) Use of U.S. Army Corps of Engineers

In March 1979, the DOE and the Corps of Engineers signed the Master Interagency Agreement for the Corps to provide professional, technical, and managerial services in support of the SPR. DOE provided 25 personnel positions to the Corps to enable establishment of a support office funded through SPR appropriations.

(2) Systems Engineering

In September 1979, The Aerospace Corporation, a non-profit Federal Contract Research Center (FCRC), was retained to provide the SPR with a strong systems engineering management and integration capability. Aerospace has been tasked to develop performance criteria to analyze and determine system planning parameters to make recommendations to optimize system operating performance to assist in the development of SPR system readiness plans and to conduct studies to continually update the SPR crude oil mix and crude oil/product specifications.

(3) Accountability Systems

SPR management both in Washington and in New Orleans has continued to develop computerized management information systems. A number of systems are currently in place and the further integration of other systems is expected to occur this year.

(4) Management by Objectives (MBO)

In January 1980, a management by objectives program was initiated with the view toward defining goals and objectives to ensure that SPR organizational units succeed in meeting goals and objectives in an integrated manner.

C. Assessing SPR Readiness Status

In addition to the current crude oil inventory of 91.7 million barrels in three of the Phase I complexes, 157.3 million barrels of storage capacity are available which can be filled at a maximum rate of 675 thousand barrels per day or a sustained rate of 500 thousand barrels per day.

The capability exists to drawdown the existing SPR inventory at a rate of approximately 1 million barrels per day. Multiple capabilities exist to drawdown and move SPR oil through major interstate pipelines to inland refineries, through local pipelines to Gulf Coast refineries and across docks on to tankers and barges to local and more remote refineries. The major interstate pipelines (Seaway, Texoma and Capline) serve refineries in Western Pennsylvania, Western New York, Minnesota, Wisconsin, Michigan, Ohio, Kentucky, Indiana, Illinois, Oklahoma, Kansas, Texas, Missouri and Arkansas. Local pipelines can be utilized to transport crude oil from West Hackberry to certain refiners in Beaumont and Port Arthur, Texas, and from Bryan Mound to the Sweeney Refinery near Freeport, Texas, via Seaway facilities.

SPR storage sites are also connected to the Seaway docks in Freeport, Texas, Sunoco docks in Nederland, Texas, and DOE docks in St. James, Louisiana, for waterborne distribution of crude oil via tanker or barge. Waterborne distribution can serve the East Coast, Gulf Coast, West Coast, Caribbean refineries, and refineries in noncontiguous areas currently importing crude oil.

Total drawdown capability for the three site complexes including (1) Bryan Mound and Seaway, (2) West Hackberry, Texoma and Sunoco, and (3) Bayou Choctaw, Capline and St. James is 1.029

million barrels per day. Distribution capability is 993 thousand barrels per day for the interstate pipelines, 184 thousand barrels per day for the local pipelines and 927 thousand barrels per day for the docks.

D. Implementing SPR Operational Readiness Testing

The SPR systems including environmental safeguards are in a state of readiness for resumption of fill or drawdown. SPR subsystem readiness tests have been performed throughout the development program as the subsystems were constructed and/or installed. Many subsystems have demonstrated their operational integrity during fill operations. In September 1979, operational tests were conducted on drawdown systems at the three complexes with drawdown capability.

Drawdown readiness tests were performed in the period August 1979 through January 1980 at the three sites containing oil: namely, Bayou Choctaw, West Hackberry, and Bryan Mound. Component and system tests have been satisfactorily completed. Over 7 million barrels of oil have been transferred in these tests to demonstrate drawdown capability.

Use of the SPR in response to a supply interruption involves functions which fall into three categories; namely, Executive Management, Administration, and Operations. The Executive Management (Level I) category includes the crisis management functions of the President, National Security Council, Secretary of Energy and an Energy Emergency Management Board. These entities, through various forums, must assess the impacts of the particular interruption scenario, evaluate available response alternatives and make policy and management decisions which will ultimately result in a Presidential determination on the use of the SPR.

The Administrative (Level II) functions include the execution of actions required to implement a decision to use the SPR. This process establishes the specific SPR drawdown requirements, methods of sale or allocation of oil and delivery schedules. This effort requires the participation and interaction of the SPR Office, Economic Regulatory Administration, Office of Procurement and Contracts Management, the Energy Emergency Management Board, refiners and terminal operators.

Operations (Level III), the third functional area, includes all the actions required by the SPR Office to physically withdraw crude oil from storage, deliver to transfer terminals, and to bill and to collect payment from purchasers.

I plan to have an SPR operational readiness exercise in April with other components of the SPR response functions being tested before October 1980.

An SPR response test concept was completed in January 1980.

E. Providing for Distribution

On October 31, 1979, the Department of Energy submitted to the Congress the Distribution Plan for the SPR, as Amendment No. 3 to the SPR Plan. Hearings were held by this Subcommittee and in accordance with the provisions of the EPCA, the Amendment became effective November 15, 1979. The Distribution Plan details SPR crude oil drawdown and distribution from the five SPR sites, SPR oil allocation or sale, and SPR oil pricing. It also provides information on proposed regulatory changes designed to implement these measures.

F. Rulemaking

On August 13, 1979, the Economic Regulatory Administration issued a proposed rulemaking to establish several systems for the allocation of SPR crude oil, including a new flexible system permitting such oil to be targetted directly at special shortage problems, outside DOE's existing regulatory programs. Thus the alternatives available for distribution of SPR oil will include competitive sales, allocation to refiners using DOE's existing or standby regulatory programs, allocation outside of such programs, or pro rata apportionment of buy rights. DOE's regulatory programs for allocation include the current Crude Oil Buy/Sell Program, the Standby Mandatory Crude Oil Allocation Regulations and the proposed separate allocation program for the SPR.

The alternative of retaining an "open rulemaking" is under consideration. It would allow us to modify the regulations within certain limits without entering a rulemaking process and the rule could be effective upon signature by the Administrator, ERA.

6. Regional and Noncontiguous Petroleum Reserve

During 1979, the Administration announced plans for development of a 24.3 million barrel Regional and Noncontiguous Petroleum Reserve, contingent on the availability of funding from the Windfall Profit Tax. These facilities would provide for storage of 20 million barrels of residual fuel oil or a suitable substitute for the East Coast, of which at least 10 million barrels would be located in the Northeast. In addition, storage in Hawaii of 2.3 million barrels of crude oil and 700 thousand barrels of jet fuel and storage in Puerto Rico of 800 thousand barrels of crude oil and 500 thousand barrels of naphtha were proposed.

Upon enactment of the Windfall Profit Tax, an SPR Plan Amendment and funding requests will be forwarded to the Congress to secure approval to develop this portion of the Reserve. So far, the following initiatives have been taken:

(1) DOE has studied representative sites on the East Coast and the Corps of Engineers has initiated a more detailed survey covering both Federal and commercial property. A meeting with State and regional representatives is being planned for later this month.

(2) Five potential Hawaiian storage sites have been identified, and a meeting with Hawaiian officials is being planned for later this month.

(3) At least three potential storage sites have been identified in Puerto Rico as meriting consideration, and Corps of Engineers and DOE personnel will be performing a detailed siting and distributing study during late February and early March.

H. Developing SPR Physical Facilities And Capabilities

The Reserve is currently being developed in three phases to meet the perceived capacity requirements.

(1) Phase I

Phase I consists of 248 million barrels of storage capacity in five storage sites, one in Texas and four in Louisiana, plus a DOE marine terminal facility at St. James, Louisiana. There are 91.7 million barrels of oil stored in the three operating sites: Bryan Mound in Texas and Bayou Choctaw and West Hackberry in Louisiana, and associated tanks and pipelines. As of September 30, 1979, a drawdown capability of 1 million barrels per day had been installed at those three sites.

Construction began in July 1977 with the installation of temporary facilities for early oil fill. Major Phase I construction began in 1978 and is essentially complete.

(2) Phase II

Phase II of the Program consists of expansion of the Bryan Mound site by 120 million barrels and expansion of the West Hackberry site by 160 million barrels. Facilities installed at these sites during Phase I will be supplemented and expanded by creating new storage caverns utilizing the technique of solution mining. The salt caverns will be leached and, as new volume is created, filled with oil in time-phased increments. Construction of Phase II is underway and will continue until Phase II fill is completed in 1986. It is also proposed that a further 10 million barrels be added to Phase II through acquisition of an additional storage cavern at the Bayou Choctaw Phase I site which will provide an economical expansion of the site and eliminate a potential safety hazard at this site.

(3) Phase III

Phase III of the Program entails the creation of 190 million barrels of new storage space for a total capacity of 728 million barrels. Detailed planning is underway and final decisions will be made during the FY 1982 budget process. Final site selection action has not been completed.

I. Improving Security

The SPR initiated a security program in January 1979 which was directed at protecting Government property and program assets.

To achieve this, SPR established a three-person security branch which has the mission of determining standards and policy, and performing an audit responsibility.

(1) Physical Security

During the year, the contractor guard force was consolidated into a single unit by merging five small contracts. The consolidation has given the program a professionally trained and supervised protective force, which performs in a consistent manner from site to site.

To better control site access, the construction of site fencing was expedited on all SPR facilities. Presently, five of the six sites are fenced.

(2) Property Control

In addition to property protection, SPR established a property accountability function. Property and stock control systems of contractors have been reviewed and comments furnished the contractors as to requirements to have acceptable property control systems.

Actual inventory of construction-type property (i.e., pipes, valves, drill bits, etc.) and the Construction Managers operating property and equipment (i.e., desks, typewriters, etc.) has taken place at Bryan Mound, West Hackberry, Bayou Choctaw, and St. James. Inventory is in process at Sulphur Mines and Weeks Island.

IV. BUDGET OVERVIEW

I would like to turn now to the FY 1981 budget request for the SPR. The budget request consists of multiple elements:

A. FY 1981 Budget Request

The Department is requesting $103,978,000. In addition other elements include:

(1) A request for appropriation language to extend the life of the SPR FY 1979 appropriation indefinitely, thereby precluding the lapse of up to $2.3 billion in funds which may remain unobligated if the FY 1979 appropriation expires on December 31, 1980 as provided for under current law.

(2) A request for language under the general provisions section of the appropriations bill to permit the Secretary to use any funds available to the Department of Energy to finance an SPR drawdown if ordered by the President.

(3) We are considering a reprogramming request to reallocate $15 million of Phase II facilities funding to Phase I and to reallocate $2.4 million in oil funding to augment program direction resources.

(4) A funding proposal for FY 1980 and FY 1981 costs of commencing work on the Regional and Noncontiguous Petroleum Reserve program, to be forwarded to the Congress after the Windfall Profit Tax is enacted.

B. Reappropriation of FY 1979 Funds

It is important to recognize the substantial range of uncertainty around SPR price and fill schedule assumptions. At the price assumptions in the FY 1981 budget, the Department has funds now available from prior year appropriations for the acquisition of approximately a further 120 million barrels for the SPR, bringing cumulative fill to over 210 million barrels. The full 248 million barrels in Phase I capacity now available cannot be filled with available funds under these price assumptions.

The fill rates associated with the FY 1981 budget imply that the Department will obligate very little of the more than $2.3 billion in oil funding which remains unobligated from the FY 1979 appropriation before that appropriation expires under current law on December 31, 1980. If this appropriation is allowed to expire, the oil acquisition strategy for the SPR would be severely constrained. The remaining funds available would be exhausted when the SPR achieved a cumulative fill of approximately 150 million barrels, leaving nearly 100 million barrels of Phase I capacity unfilled.

Therefore, it is requested that appropriation language be enacted to extend the life of the FY 1979 appropriation indefinitely to permit the execution of an orderly oil acquisition process.

C. Drawdown Funding Authority

During a drawdown of the SPR, the Department will incur incremental costs for terminalling services, operations and maintenance workforce increases, electric power to operate the sites, and the like. At the current SPR fill level, a full drawdown could cost $20 million, but in future years, when a higher fill level is achieved, such incremental costs could reach $100 million for each drawdown.

Under current law, SPR receipts would be deposited into the Treasury as revenues rather than used to offset SPR costs, therefore, such funds are not available to the Department automatically to finance the incremental costs of a drawdown. At the present time, the Department has sufficient unobligated balances in the SPR appropriation to cover such incremental costs, but this might not be the case in the future.

Therefore, the Administration is proposing language under the general provisions section to permit the Secretary to use any funds available to the Department of Energy to finance the costs associated with an SPR drawdown if one is ordered by the President.

It would be the Department's intention to seek additional funds to cover drawdown costs when a drawdown is ordered, so the authority requested would be used primarily to cover the period prior to Congressional approval of such a funding request. Having access to funds to pay for SPR drawdown costs is an integral part of SPR systems and we urge Congressional enactment of the language proposed.

D. Reprogramming Request

A letter will be transmitted to the Congress requesting reprogramming of $15 million in Phase II funding to Phase I and of $2,449,000 in oil acquisition and transportation funds for use in Program Direction.

Phase I Funding: In the FY 1980 budget, the estimate at completion for Phase I site development was set at $840,900,000. This estimate has been increased by $15 million to account for cost increases in the Phase I drilling program. It is requested that reprogramming of $15 million of available Phase II levels be approved to finance this cost increase. While no further funding is requested for Phase I at this time, Congress needs to be aware that there remain to be settled a number of real estate condemnation cases now under review by the courts. If the courts award judgements in excess of budgeted funds, further appropriations for Phase I may be required. The reprogramming letter requests approval for the use of available Phase II funds to cover such over-budget awards if and when they occur.

E. Regional and Noncontiguous Petroleum Reserve Funding

The Regional and Noncontiguous Petroleum Reserve funding proposals have not been transmitted to the Congress. After enactment of the Windfall Profit Tax, both an SPR Plan Amendment and a funding request will be transmitted to the Congress to permit work on the Regional Petroleum Reserve to commence.

V. HEALTH OF THE PROGRAM

The SPR Program has made outstanding progress over the last year in the attainment of the physical facilities and capabilities of the Reserve. Major Phase I site construction is essentially complete and Phase II construction is underway. Significant improvements have been made in the management of the sites. An improved geotechnical characterization and assessment of salt dome storage sites has been developed and as a result of our review of Phase II and Phase III cavern design, well drilling plans have been changed. Our review of the stability of the crude oil in storage and our readiness tests have been successful. The capability exists to drawdown the existing SPR inventory and a Distribution Plan is in effect. Taking into consideration the problems which have beset the Program, the accomplishments of the past year are substantial.

The future of the SPR Program looks optimistic. A crude oil fill strategy is now under active development. Planning is underway for the commencement of Phase III and for the development of a Regional and Noncontiguous Petroleum Reserve.

As the world energy supply situation tightens, there is still considerable work to be done to create a strong reserve which will provide the security the United States needs to protect us from a severe energy supply disruption. I believe, however, that the achievement of that goal is fast becoming realized.

This concludes my statement, Mr. Chairman and Members of the Subcommittee. I would be pleased at this time to answer any questions.

Mr. **Dingell**. We thank you for your presence. I am not sure that our discussion today is really with the person we ought to be engaged in discussion with. Tell me whose decision it has been to postpone purchase of oil for SPR?

Mrs. **Davis**. It has been a decision of the administration at the highest level involving the President and the previous Secretary of Energy.

Mr. **Dingell**. I am not unaware that it is a decision of the administration. What I am trying to find out is who do we call to explain this matter? We have you here. You are going to have a difficult day of it, but I am not satisfied that it is proper that we should treat you that way because I am keenly satisfied that it probably is the Office of Management and Budget or perhaps it is the Domestic Council or perhaps it is someone else.

Who has made the decision that this program shall not acquire oil for the purpose of filling it? There is no oil money, no money for acquisition of oil in this year's budget, is there?

Mrs. **Davis**. We have adequate funds available for the acquisition of oil in this year's budget.

Mr. **Dingell**. Your appropriation expires though, does it not?

Mrs. **Davis**. Yes. We asked for language to extend that so it does not lapse. We intend, rather than worrying about why we stopped, to insure a beginning again.

Mr. **Dingell**. When?

Mrs. **Davis**. As I indicated, we intend to do that in the first half of calendar year 1980. I indicated the reason we could not provide a precise date is that that ability does not lie solely within the Department of Energy.

Mr. **Dingell**. I am keenly aware of that.

Mrs. **Davis**. It involves discussion with our allies to whom we are committed from the Tokyo summit as well as discussions to insure that we have a full understanding of what we are doing and by oil producing countries still friendly toward us understand this as well. Those discussions are underway. Both the Secretary and I assume it will be soon.

Mr. **Dingell**. What one person is making the decision or what group of persons or what decisionmaking process is making the decision? I have a feeling it is some kind of an amorphous decisionmaking process going on, but I am not sure whom to talk to about these failures.

Let me tell you why I am concerned. Last year it was testified before this committee that SPR would be filled by 1986. This year's budget says it will be filled by 1989. Somewhere between the testimony last year and the testimony this year 3 years were added to that period for filling. Now, who made that judgment?

Mrs. **Davis**. That judgment was by responsible officials in the Office of Management and Budget and the Department of Energy.

Mr. **Dingell**. Office of Management and Budget and where else?

Mrs. **Davis**. The Department of Energy.

Mr. **Dingell**. Did the State Department have anything to do with it?

Mrs. **Davis**. You are talking about the extension of time for the fill and the two major factors in that extension of time were related to, one the slowdown in the phase III facility construction.

That would give us 750 million barrels of capacity which will now be completed in 1989. That was a domestic decision made by appropriate officials in the Department of Energy and in the Office of Management and Budget.

Mr. **Dingell.** Under the tutelage and guidance and instruction of the Department, or the Office of Management and Budget?

Mrs. **Davis.** It was made in conjunction, as is traditional, between OMB——

Mr. **Dingell.** OMB said you won't fill this until that time. Is that what happened?

Mrs. **Davis.** The first factor as I indicated, was the extension of the phase III complex until 1989. The second was the decision not to fill, to stop fill during the emergency until we can start to fill and know that precise date and also have an agreed upon rate of fill. It is very difficult to indicate whether or not we would reach that level of capacity by 1989. It is our intent and our budget shows that.

Mr. **Dingell.** We are talking apples and oranges, because originally it was DOE's intention that you would have 1 billion barrels stored in 1986. Now, you have moved that projection forward to 1989 and you have cut the figure from 1 billion to 750 million.

Mrs. **Davis.** I would make two distinctions here, Mr. Chairman. There has been no policy decision to change the capacity of SPR from 1 billion barrels. The 5-year projection in the budget only indicates the funding to fill and construct for 750 million barrels by 1989.

Mr. **Dingell.** You are going to excavate capacity for 1 billion barrels by 1989 and put 750 million in?

Mrs. **Davis.** We plan to achieve a 750-million-barrel capacity by 1989. We have not yet decided when to achieve the extra 250-million-barrel capacity. I will make the first recommendations for that on the revised time schedule in the budget cycle to the Secretary of Energy.

Mr. **Dingell.** Now, you have capacity, you have 90 million barrels in storage and you have how much capacity at this time?

Mrs. **Davis.** We have capacity for 248 million barrels which gives us roughly 157 million that we can fill if we use the naval petroleum reserve which, as I said, is the decision that we will make shortly. We would have roughly 100,000 barrels a day fill rate just from the naval petroleum reserve.

Mr. **Dingell.** At this point, you have no plans whatsoever that you can cite to put oil in there, do you?

Mrs. **Davis.** Soon we will decide the utility and the feasibility of using the naval petroleum reserve oil for this SPR.

Mr. **Dingell.** The naval petroleum reserves, if I can recall correctly, we have owned them since the 1920's. Some have been on public domain since the acquisition of Alaska. You cannot tell me this is a novelty or something new or extraordinary that we just discovered we possess. Do you have any contracts or do you have any concrete plans at this time at all for the placing of oil in the strategic petroleum reserve from the naval petroleum reserve or from any other sources?

Mrs. **Davis.** Yes; we have.

Mr. **Dingell.** Specific plans in places you can pull off the shelf?

Mrs. DAVIS. We have ongoing plans, for so doing.

Mr. DINGELL. When will that planning process put some oil in SPR?

Mrs. DAVIS. As I indicated, we hope it will start in the first half of calendar 1980.

Mr. DINGELL. Is that a commitment from the Department of Energy or is that highest expectation? We have been receiving pious expectations before this committee about this matter since I became the chairman of the subcommittee 5 years ago. I want you to understand although your comments are comforting to me, I have been comforted so many times I find comfort not to be much value in these matters.

When are those promises going to mean some oil going into the ground?

Mrs. DAVIS. Mr. Chairman, I am neither making pious comments nor am I making a commitment on the part of the Department. As I said, the Department of Energy is not able to make that kind of commitment.

Mr. DINGELL. Because the OMB will not permit it to do so?

Mrs. DAVIS. No.

Mr. DINGELL. What is the reason?

Mrs. DAVIS. It requires a decision by the President.

Mr. DINGELL. Is it the President that is at fault?

Mrs. DAVIS. No; the President is not at fault.

Mr. DINGELL. Somebody is at fault because you had authority since 1975 to fill this reserve and you have 90 million barrels in it and each year you have failed to meet your goals of oil to be put in the ground. You have no contracts in place for the acquisition of oil, no concrete plans for the use of SPR or anything else.

I won't say this is the worst record in Government in terms of moving a program forward, but it certainly is a very bad one and it is by no means a matter of pride to me that in my oversight, I have not been able to energize your Department toward better response.

I am going to tell you what I am going to do today. I am going to send a letter to the Secretary and I am going to ask a number of specific questions about when this oil is going to commence going in and so forth. And, I am going to try and figure out some way of seeing to it that you people finally respond to the law which was passed in 1975 which says you shall have a strategic petroleum reserve in place by a given time and place, which you have not done.

Mrs. DAVIS. We certainly will be very glad to respond to that letter. We will be glad to help your staff work on it. I would again comment that we do have plans in process and I have indicated that.

Mr. DINGELL. Plans in process down there have been since I became chairman of this subcommittee a good while back. I regret having to speak to you this way. It is painful to me, but it is not painful to me to ask the Department of Energy to do that which the law requires them to do. And, it is plain to me you have not.

Mrs. DAVIS. Let me point out we did not have any plans for using strategic petroleum reserve in the past because the economics of the crude oil market would have dictated against that, until within the last year. During that last year when the economics as well as the vagaries of the international world marketplace dictated, we have started a process which, as I said, we hope to have in place in the very, very near future, meaning we will initiate soon enough we can start filling the first half of 1980—a process that I think has moved quite rapidly considering that we cannot even as a nation make that commitment without consulting with our allies.

Mr. DINGELL. At this minute, the Department of Energy is selling Elk Hill oil at $41 per barrel and at this particular moment you are also selling royalty oil instead of taking it in kind. You can put royalty oil that you are getting from off shore leases and leases on public land into the strategic petroleum reserve. You don't have to move it by tanker. You can use the regular mechanism of exchange of oil through the regular marketing system, to get that oil in to the strategic petroleum reserve, can you not?

Mrs. DAVIS. Yes, but one——

Mr. DINGELL. Then why has that not been done?

Mrs. DAVIS. One, it would not have been economically worth considering until the last year. During this last year——

Mr. DINGELL. On what date last year?

Mrs. DAVIS. I don't know. I think it is related to market conditions and I would rather point out that after I came to DOE in November we have initiated and are in the final stages of—not only looking at but also recommending the means to implement the fill of SPR from domestic sources.

Now, when you say that we are selling NPR oil at $41 a barrel, actually the average of the bids was about $35 a barrel which hits the middle of the uncontrolled oil prices.

Mr. DINGELL. It is generally above world contract prices?

Mrs. DAVIS. It hits about the middle of the uncontrolled today. That has been historically the precedent so that only 10,000 barrels were actually proposed at the $41 a barrel limit. That was about 7 percent, if I recall, of the NPR. One has to look at the set-aside for the small refiners and at the overall picture. Then one can see that that $41 does not apply to the strategic petroleum reserve, but simply to 7 percent of and that particular company probably will not finish its contract.

Mr. DINGELL. You have been selling that oil to Japanese companies, have you not?

Mrs. DAVIS. No, we sell it to domestic refiners. One of the companies is a wholly owned subsidiary. One of the successful bidders is a wholly owned subsidiary of a Japanese company, which refines and sells domestically. Thus, we are conforming to the law which requires that this be refined and used domestically.

I would also point out from my interest in national security that 60 percent, as a best guess of the Department of Defense, of the naval petroleum reserve refined oil does go to the Defense Fuel Supply Center. I think it is a very strong responsibility to insure that we don't cut off our immediate input to national security in favor a longer term, less-able-to-be-quantified benefit. So, that has entered into our planning, too, to make sure that if we do use for the SPR, naval petroleum reserve oil, we make sure we do this in coordination with the Department of Defense so they don't lose that 60 percent of 167,000 barrels a day which they now depend on.

Mr. **Dingell.** The reason we have gone to strategic petroleum reserve instead of preserving the naval petroleum reserve oil supplies in the ground has been that you can get a faster withdrawal. Given the speed of withdrawal of oil from your naval petroleum reserve—and there is different speed of withdrawal from the strategic petroleum reserve—if you exceed either, there are certain damages that will occur.

In the case of the naval petroleum reserve oil, if you withdraw in excess of a predetermined speed, you damage the reservoir and you cause yourself a number of other unpleasant and uneconomic consequences. I don't think that we ought to refight the question of whether we ought to be putting oil in the ground or taking oil out of the ground. It makes good sense to anybody who studied the question.

Although some folks laugh about it, my lack of humor on the matter relates to something different. That is in spite of the fact there is a statute on the books, appropriation of funds, and full authority to go foward now for something approaching 5 years, you have not done a thing for better than a year.

I find that indefensible given the world market and the Russians moving into the Persian Gulf area.

Mrs. **Davis.** I would agree that both the Secretary, the Deputy Secretary, Under Secretary, and I feel very much the responsibility for changing what we consider to be an intolerable situation and we are further along and are close to——

Mr. **Dingell.** I am prepared so to accept your statement at its face value, that you propose to move this program forward. What I am trying to have you tell me is who is it that is responsible for the delay in that matter, so we can get them before this committee and perhaps reform their thinking so you can start filling that reserve.

With those comments, I am going to recognize my colleagues in order of their appearance. Mr. Moorhead is recognized for 5 minutes.

Mr. **Moorhead.** Mr. Dingell, our chairman, is not isolated in his concern about this problem because many of us would never have voted the large sums of money to get the program started if we had realized it was not going to do anything for so many years. What might be economically profitable on a billion barrel level certainly is not, when you buy the facility for a billion barrels and keep it at 91 million year after year after year.

Could you give me some idea about leakage that you get in a program such as this? Of the 91 million barrels you put in the ground, how many do you estimate you will get back out?

Mrs. **Davis.** Let me turn that question over to Harry Jones.

Mr. **Jones.** There is no leakage. We estimate that we can retrieve about 98.5 percent out of the ground. It is not economical to retrieve more than that, as our studies now show, but we do not have totally accurate data on the shape of the caverns. We have sonar surveys which are only up to 5 percent accurate, but we are fairly confident of that number.

Mr. **Moorhead.** Last September during hearings before this subcommittee, the Department testified that we would start filling again. Does that assume there is a soft world market? Do you think there is ever again going to be a soft world market?

Mrs. DAVIS. It is a conjecture, Mr. Moorhead. There is no reason from an economic point of view to assume there won't be. However, I am prepared to say this morning that we are not going to be waiting for a soft world market in order to start the fill. The Secretary and I—there is no one more anxious than the two of us plus John Sawhill and John Deutch to start the fill and we are indeed going to be doing it on the basis of availability and utilizability of domestic crude as well as international crude as soon as we are sure, not that there is not a soft world market, but that our allies understand what we are doing and we adhere to our commitments at the Tokyo Summit.

Mr. MOORHEAD. You know that in the changing world, I think, some of the principles could be applied that we have in many other lifetime goals, like if you want to buy gold you buy a little a month regardless of what the price is, and mutual funds the same way and in many other areas. You don't worry about what the price is at the particular time because the price is going to gradually go up.

I would feel better about this program if we were buying some oil every month so that as the years went by, there was oil piling up in the reserve rather than waiting for the time when the rainbow would be golden at the other end and we would find that perfect market where we could get a tremendous bargain and we could fill it up. I don't think that time will come and I think if we don't start buying, we won't get that filled.

Mrs. DAVIS. I think you will find that sentiment echoed in the Department at this time. I can only comment that we also must to reach a balance between our desires, which are the same as yours, and the other national and international considerations to which the President must react. I can assure you that from our point of view and the Department, Under Secretary and Deputy and Secretary, we want very much to start fill the SPR and we intend to do so by hastening the process of having that decision made.

Mr. MOORHEAD. I hope we don't get the same report next year that we are getting now, that nothing was done in 1980 and you get to almost feel that is what the report is going to be.

Mrs. DAVIS. I suspect since the world situation is changing so dramatically, that there is a very small probability that you will get that same report next year.

Mr. MOORHEAD. When the budget request was made for this reserve $29 a barrel was what they estimated for the average cost. That was January. Do you really think you are going to be able to buy it for $29 a barrel, as you go along? You know what you could have bought last year for $18 is up to $29. You made your estimate in January, aren't you going to be paying $40 or $50 or $60?

Mrs. DAVIS. Yes, we are going to be paying more. There are a number of projections that we use in indicating the price per barrel that we pay. We do have new numbers that we are already using because apparently the cost not only has gone up, but as we know, it will go up and Harry will tell you the precise cost estimates that we are using.

Mr. JONES. I want to point out that the $29 a barrel assumes a delivered cost less the entitlements, so it is within a dollar of what we could expect to pay today.

Mr. MOORHEAD. Wouldn't it at least be wise to make a financial bid for the oil even though it were not available right now? The price is just constantly rising on us. We are going to have a very, very expensive reserve if we let that price hit the Moon before we start buying.

Mrs. DAVIS. We do intend to start solicitations. We want to be able to do it at a realistic price and under realistic conditions so we get some responses. That is one of the comments that I made in saying that this is a process which we want to start the first half of this calendar year, want to restart. Obviously, it has been going on and was stopped.

Mr. MOORHEAD. I want to thank you for coming this morning. My time has expired.

Mr. DINGELL. The Chair thanks the gentleman from California. The Chair recognizes the gentleman from Texas, Mr. Loeffler, for 5 minutes.

Mr. LOEFFLER. Thank you, Mr. Chairman. Mrs. Davis, earlier you mentioned the withdrawal plans for the SPR. I would like to follow up on that. In November, Deputy Secretary Sawhill indicated to this subcommittee that a more detailed drawdown plan for the reserve would be submitted to Congress within 6 months. Does the Department of Energy still intend to submit this drawdown plan, and when?

Mrs. DAVIS. We do intend to adhere to the requirements to which we and the subcommittee have mutually agreed. We have written a letter—from Mr. Sawhill—indicating our plans for handling drawdowns.

Excuse me, Harry, did you want to enlarge on that?

Mr. JONES. As was agreed, the Department intends to consult with the Congress before implementing a drawdown. I do not have a specific date on which we intend to submit a revised drawdown distribution plan as a SPR plan amendment.

Mr. LOEFFLER. What is the current lifting rate from the present SPR facilities?

Mrs. DAVIS. The withdrawal?

Mr. LOEFFLER. Per day.

Mrs. DAVIS. At the moment, in round numbers, slightly over 1 million barrels a day from the three sites at which we have oil.

Mr. LOEFFLER. What is the maximum withdrawal capability of the NPR?

Mrs. DAVIS. If it were filled to the extent it could be in phase II, it would be about 3.5 million barrels a day.

Mr. LOEFFLER. In NPR or SPR? I am talking about the Naval Petroleum Reserve.

Mrs. DAVIS. We have to produce by law at a maximum efficient rate and that at the moment is 167,000 barrels a day with 25 percent set-aside to small refiners.

Mr. LOEFFLER. You were responding to questions earlier and I share the same sentiment expressed by the chairman and the gentleman from California, in that I am deeply disturbed that this has been such an inadequately administered program. Why have you not considered opening up Federal lands for exploration and development for the purpose of filling SPR? Why haven't you moved, for instance, on the acquisition of the Federal royalties that are available?

Mrs. DAVIS. The use of royalty oil has been one that has been considered quite extensively this year. Royalty oil primarily goes to many small refiners in the Southern part of the United States and the ability economically and feasibly to either deprive them of the royalty oil or to, based on the number of small refiners involved, to collect and make arrangements for exchanges in kind, does not at the moment appear to be one of the economic or feasible ways of using domestic oil from Federal land.

The naval petroleum reserve is a much more attractive source than royalty oil at this time.

Mr. LOEFFLER. What about the Federal lands that are now closed that could be explored and developed? Isn't that a very powerful source of oil that might be placed in SPR?

Mrs. DAVIS. Yes, we have in the Department of Energy, as you know, the responsibility to work with the Department of the Interior who has the leasing responsibility for the Government. Within that leasing responsibility we have the right to try to insure that energy producing minerals indeed are allowed to be explored for and exploited from Federal lands.

We also have the right, which we have exercised, of setting production goals and rates, but the Department of the Interior is responsibile for leasing the Federal lands in their entirety.

Mr. LOEFFLER. Has the Department of Energy pursued with the Department of the Interior any effort to achieve increased production on Federal lands, primarily of oil, to be placed in the SPR?

Mrs. DAVIS. Let me not say in SPR. We have first pursued actively the very difficult task of expediting the use of Federal lands for oil exploration and development. We have been very active in achieving the ability to explore and develop the NPR in Alaska for oil which would not have been a part of the original intent of the Department of the Interior.

We also have and are working very closely to increase the use of Outer Continental Shelf land and to also set production goals so that the companies who obtain those leases are obligated to produce with diligence either against the goal or against the rate.

Mr. LOEFFLER. I believe what you are telling me, then, is that the Department of Energy has not actively pursued the acquisition of Federal royalty oil for placing into the SPR.

Mrs. DAVIS. I would say our activity has stepped up 200 percent in the last 3 or 4 months. We have a very active program underway and we are pursuing not only concurrence, but endorsement, at the levels of both the Secretary and the Deputy Secretary. We are pursuing the more rapid use of Federal lands for energy producing minerals while still meeting the environmental requirements.

Mr. LOEFFLER. Concerning our current drawdown capability, can you give me a brief explanation of what you anticipate to be within the withdrawal plan? What are the various areas that you are considering in the overall plan?

Mrs. DAVIS. I would like to, if I may—because our activities are so much more in process at this time than they were before—submit that for the record because we are talking about several billion acres of Outer Continental Shelf at three-quarters of 1 billion of arterial land in total and a significant portion of that being looked at for withdrawal.

With your permission, I would like to provide that data in useful detail for the record.

Mr. LOEFFLER. Thank you, Mr. Chairman.

Mr. DINGELL. The Chair thanks the gentleman. The Chair recognizes the gentleman from Indiana, Mr. Sharp.

Mr. SHARP. Secretary Davis, I am pleased that in your responses that you exhibit some urgency in new renewed commitment to get things moving at SPR. I think it is critical that we do. Like the others on the committee, I am disturbed. Last year seems to have drifted away. It may have been wise to have held up during the critical moments of last year, but it is difficult for some of us to understand why progress has not been made since.

What I would like to ask you is, about this commitment that was made at Tokyo to consult and not to purchase if it would be disruptive to the market. Do you have information or can you tell me where we can get it as to what has been the activity of our allies? What has been the response of Japan and Germany? What kind of stories do they have? Did they in fact stop purchasing like we stopped or did they go ahead or what has been the action?

Mrs. DAVIS. We have the record of the equivalent strategic petroleum reserves for as far as we know for all of our allied countries, including Japan, West Germany, Belgium, Netherlands, France, and Italy and the like, if there are any others that I missed.

We have indications that there has been a stoppage by all those countries filling, as we are, storage caverns. There has been a stoppage of that fill. In some instances, such as that of the Netherlands, the storage is in tankers. In Japan the storage is primarily tankers. In that case, it is a floating storage and that is not calculated in the same way.

The data that we have I would be very glad to submit, since they do estimate size and indicate stoppage. I would be glad to provide it for the record.

Mr. SHARP. We would appreciate that. But it is your understanding that Japan did in fact stop and has not been buying for their storage?

Mrs. DAVIS. That is my understanding.

Mr. SHARP. Could you confirm that for the record please?

Mrs. DAVIS. Yes. I have said I would do so.

[The following information was received for the record:]

OTHER STRATEGIC RESERVES

Both Japan and West Germany have suspended oil purchases for their strategic reserves. Japan suspended acquisition of crude oil for its strategic reserve in March 1979. Japan has 31 million barrels currently in reserve aboard offshore tankers. West Germany is the only other ally with a strategic reserve in place, although Holland and Sweden have stated they intend to develop a reserve. West Germany suspended acquisition in November 1978. The Federal Reserve currently holds 44 million barrels, some of it in salt dome storage.

The Tokyo agreement establishes oil import ceilings, not only for crude oil but for petroleum products as well, and does not limit domestic oil production. The United

States and its summit partners agreed at Tokyo in June 1979 to limit net oil imports in 1985 as follows:

[Millions of barrels daily]

United States	8.5
Canada	.6
Japan	6.3–6.9
France	2.3
Germany	2.9
Italy	2.5
United Kingdom	.1

Mrs. **Davis.** I would again remind you that their storage is different than ours in the inventory and the requirements for reporting are, therefore, somewhat different since it is floating storage primarily.

Mr. **Sharp.** It sounds to me like that means it is fungible; you can sort of move it around and not count it. You count it for whatever purpose you want. I guess as my question implies, I am concerned that in fact we have been perhaps more cooperative than others in this effort and I am a little concerned that perhaps we are not always getting the cooperation we should be getting now, and we ought to be pressing harder in the effort, especially to use our local reserves.

So, let me ask you, did the agreement address the question of using domestic sources? Is the agreement only related to, in other words, the problem of import for strategic petroleum reserve or does the agreement cover just the filling under any circumstance? Do you understand the difference?

Mrs. **Davis.** I understand. I think it would be better for clarity to provide that answer for the record. It did address the two major topics you are referring to. It addressed them both.

One was import quotas; the other was filling of reserves when the filling of reserves would have an impact on the market, so generally it did address both of those aspects and it did not, therefore, have to address domestic separately, since it addressed the filling of reserves.

Mr. **Sharp.** In other words, what you are telling me is the agreement clearly would have prevented, without the consultation and the decision to go forward, the use of the naval petroleum reserves in the United States of shifting them into the strategic petroleum service.

Mrs. **Davis.** It requires consultation before filling of reserves from any source. Thus, I think the answer would be yes. I would also state what will be trite because you all know it very well and that is, there is no real good cleavage between domestic and international oil for supply because the use of one impacts directly on the other, as you know that far better than most.

Mr. **Sharp.** Let me ask you this. To use the naval petroleum reserve oil for strategic petroleum reserve, does that require any changes in legislation?

Mrs. **Davis.** No, it does not. The President has the authority to decide that, provided such a decision meets the requirements of the law for declaring an adequate emergency exists. We do not believe it requires any change in legislation.

Mr. **Sharp.** In other words, you believe the President could decide next week that we would do that.

Mrs. **Davis.** We believe the President can do that without the requirement for legislation.

Mr. **Sharp.** How about the use of royalty oil?

Mrs. **Davis.** As far as I know, the only domestic source that would require Presidential decision to change the way it is being used now would be the naval petroleum reserves. That is because Congress has mandated that that oil supply has to be sold to the highest bidder and to do otherwise would require Presidential decision and the meeting of certain emergency requirements.

Mr. **Sharp.** As you know, S. 932, the synthetic fuel bill includes the Dole-Bradley requirement that you fill at a rate of 100,000 barrels a day and we on the House side in that conference are going to have to decide to accept that, reject that, or to alter it.

I might suggest to you from the informal discussions that have been going on, there is intense interest in placing some kind of clear-cut requirement on the Department to fill the SPR which could bring us into conflict with the executive agreements. The answer of the Department to our written questions appears to be rather vague, vague as to how the Department feels about the kind of requirement Dole-Bradley would impose, although I would read between the lines and imply that you do not want to have any direction from Congress on what you do.

Congress is so intense about this matter that if we do not see some kind of clear-cut indication that the President is willing and ready to consult and make the decision or OMB is or the Department is, or whoever, that we in fact will just confront the executive with the challenge to its agreements and its relations with the allies and Saudi Arabia and others.

That may or may not be a fortunate situation for the country. So, I guess I would suggest to you that we are talking about making a decision in the next 6 weeks and the clearer it is as to what the policy is of the administration, the more likely it is we will make a wise decision in the conference committee.

That is not meant as a threat. It is just meant that hard ball is going to be played in this issue. People are very concerned.

Mrs. **Davis.** I couldn't agree more. We have been working with the relevant staffs and some on this committee. I would like to continue to so work with them to better our knowledge as to how we would like to see that requirement or to a recognized amount of fill, both on the basis of technical capability and on the basis of minimum.

Mr. **Sharp.** We are going to want some kind of requirement. The question would be: How much discretion is left? And obviously there are practicalities there but there are also international, diplomatic, and political decisions.

If I could go back to one question you asked, Mr. Chairman, and the answer seemed to be there are clear-cut plans in progress to fill this. When you say that, I am trying to determine whether you mean there are, in fact, plans that you could go with if you could get a "go" decision or are you saying if the President, OMB, and everybody decided next week, you would still be in the process of developing plans as to what course of action would be taken to fill?

Mrs. **Davis.** If I understand your question correctly, I would say that the latter statement that you made was correct.

Mr. **Sharp**. Then, how long would it be, if you were given a "go" decision, before you could actually begin to make some kind of firm commitment to NPR or outside contractors or somebody to buy oil?

Mrs. **Davis**. The beginning of the process of utilizing NPR oil would begin immediately. Now, my vagueness is on the fact that we would be working with the current users and refiners, and also trying to have exchanges to get the most economically attractive equivalent source because, quite frankly, the movement of NPR oil directly to the SPR is not economically equivalent. The process of finding an equivalent movement, a movement of equivalent oil into the SPR, however, could begin immediately.

In fact, we are ready and have outlined the steps for so doing because this is part of our acquisition strategy that I mentioned before.

Mr. **Dingell**. The time of the gentleman has expired. The Chair recognizes the gentleman from Massachusetts, Mr. Markey.

Mr. **Markey**. Thank you, Mr. Chairman. My question is going to focus on the regional petroleum reserve which is of specific interest in New England. In reference to page 10 of your statement, does the administration consider the windfall tax revenues of $227 billion sufficient to permit the establishment of a regional petroleum reserve?

Mrs. **Davis**. I do not know that I can address that directly because we have not identified sites for the storage. We have not identified necessary construction funds. We are able to extrapolate from our experience very obviously in phase I and phase II to know, depending on the site, what the cost would be. I do not believe that we have completed that analysis.

Mr. **Markey**. So you cannot give us a commitment then?

Mrs. **Davis**. Let me ask—what I think the money in the windfall profit tax revenue was intended for, was for the facilities development and excluded that very capricious cost item of the oil itself. So that what it will take before we can give you an exact estimate of the cost as opposed to a commitment is a determination of what those sites will be, particularly in your case in the Northeast.

Mr. **Markey**. That is our concern. So you have not made that decision. You have not made that determination yet?

Mrs. **Davis**. That is right. We are now doing so. The statement is correct, quite correct. We have just begun looking at representative sites and we do not have any funding to do so at the moment. We have asked for funds so we can to work on the regional and contiguous reserves on the assumption they will come into being on enactment.

Mr. **Markey**. You will ask for money from whom?

Mrs. **Davis**. We will ask Congress for money after the enactment of the windfall profit tax.

Mr. **Markey**. But the administration is still committed to that proposal?

Mrs. **Davis**. Very much so.

Mr. **Markey**. This is what is disturbing to me about dealing with New England and in such a capricious fashion as you have done, that you have tied the funding for the 12 nonpermanent positions here in your budget book to the passage of the windfall profit tax and the creation of an energy security trust fund.

Now, it is my understanding that the conferees have decided not to establish an energy security trust fund so where does that leave the 12 positions and where does that leave the commitment of the administration to have the regional petroleum reserve be given the proper attention?

Mrs. DAVIS. I am not sure that we have any firm understanding as to the energy security trust fund, and I would add that the regional and noncontiguous reserves from my understanding are no longer tied to that. They are tied to the windfall profit tax.

Mr. MARKEY. It was our understanding that it was tied to the energy security trust fund and you tell us now it is not.

Mrs. DAVIS. It is my understanding it is tied just to the windfall profit tax.

Mr. MARKEY. Where does the administration get off in tying the regional petroleum reserve to the windfall profit tax in the first place? On December 22, 1975, Public Law 94-163, in establishing the security strategic petroleum reserve plan, states "It shall provide for the establishment and maintenance of regional petroleum reserve."

It does not state it shall be tied to passage of a windfall profit tax or creation of an energy security trust fund and why does New England, which imports 80 percent of its oil and is 80 percent dependent on oil, have to be held hostage for the past 5 years, and now continuing, to a first ambiguous Federal policy, to a commitment to Federal petroleum reserve, and now for some reason or other which is difficult for us to understand, to passage of windfall profit tax when the rest of the plan and direct mandate from the law of 1975 was for the creation of strategic and regional petroleum reserves?

Where does the administration get that authority or where do you find that justification for tying our destiny in with the passing of the windfall profit tax?

Mrs. DAVIS. Let me comment in several statements, if I may. First, the Department's early judgment that centralized storage, such as we are having and implementing in the gulf coast area, would be adequate, based on our knowledge of transportation modes, to serve the various regions of the United States in the emergency for which that reserve was intended.

For that reason we believed that the strategic petroleum reserve can indeed carry a major part if not all the burden of helping the various regions.

We indicated specific additional requirements for regional storage including a portion of those to be located in the region itself which was the commitment that the President made last year, it was that latter commitment which is tied to the windfall profit tax.

The rulemaking and by allocations which the Department has the responsibility to develop for allocating of the oil from the strategic petroleum reserve, I am convinced we can take care of very regional emergency situations as well as a gross national emergency.

Mr. MARKEY. As you know, we have a very impecunious problem in the Northeast because we do import 80 percent of our oil and in case of a cutoff, the likelihood that New England would be able to survive without severe economic consequences for a period of more than 20 to 40 days is very unlikely.

With the regional petroleum reserve of 10 to 20 million barrels and with some real stringent conservation measures undertaken by the region, we might be able to string it out for 75 or 100 days. But I do not think that tying it to a windfall profit tax and not having any commitment beyond that other than some kind of nebulous promise that there will be a commitment out of the central petroleum reserve, I do not think that is satisfactory.

I think we have to have some kind of real commitment from the administration to the New England region that you are going to seriously make a commitment to make the kind of financial investment in our region that the other regions by necessity almost have the opportunity and are being able to take advantage of.

Do you as an administrator understand and are you going to make that kind of fight for us up in New England if the trust fund or the windfall profit tax is not sufficient or do you think New England really can get by without having that?

Mrs. DAVIS. I cannot answer the latter question directly because of the number of externalities. I can say straightforwardly within the Department, I will commit myself to making sure that the rulemaking in the allocation recognized regional as well as national requirements.

Mr. MARKEY. Implicit in what you just said, do you think that the strategic petroleum reserve, absent regional petroleum reserve, might be adequate?

Mrs. DAVIS. The adequacy depends on the time and cost. The answer was that was the original intent.

Mr. MARKEY. We thought you had made a commitment.

Mrs. DAVIS. I think it was the original presumption that the strategic petroleum reserve would serve as a buffer against the kinds of catastrophic situations you are talking about, I see no reason and I have seen no indication that there is any fallback from that in the Department of Energy.

Mr. DINGELL. The time of the gentleman has expired.

The Chair recognizes the gentleman from Texas, Mr. Collins.

Mr. COLLINS. Thank you, Mr. Chairman.

Madam Secretary, before you took this particular position, had you been in the Department of Energy?

Mrs. DAVIS. No, I came from the position of being Deputy Under Secretary of the Department of Defense.

Mr. COLLINS. So, this is a completely new responsibility for you.

Mrs. DAVIS. In terms of organization, not in terms of substance, Mr. Congressman.

Mr. COLLINS. I just wanted to know whether you had done much of the total development program for this particular Department.

Mrs. DAVIS. Yes; I have done a lot of policy level activities.

Mr. COLLINS. In the past?

Mrs. DAVIS. Yes; and in the Department of Defense I was the official mainly responsible for the Department of Defense's actions, concerns and policies for mobility fuel to serve national security needs.

Mr. COLLINS. This operation had not had a particularly successful experience in building up our reserves.

Mrs. **Davis**. No, it has not.

Mr. **Collins**. I was assuming you had not been responsible for it and, therefore, could be more objective.

Mrs. **Davis**. That is my assumption too.

Mr. **Collins**. Do you have a summary of projected costs compared to actual performance for this particular operation of collecting these reserves? We have had several different programs. This has all been combined. Has it all been combined in one report?

Mrs. **Davis**. I am not sure, Mr. Collins, but we would be glad to provide you with the analyses on hand that we have.

Mr. **Collins**. I would like that. It does not need to be included, if you just give it to me, I would like to go through it. I just wonder where we are going when I looked at the staff. You had 165 in 1979, 190 in 1980, and you were asking for 202 in 1981. The interesting part is that they are all experts, not all but three out of four are experts. Out of 191, 145 are GS-12's or better, which I assume earn about $25,000 or more.

Why do you need all these experts?

Mrs. **Davis**. I will give you a very brief statement and then ask Harry to answer that. I would simply say that what I call petroleum engineering and underground technology are very difficult. Expertise is very scarce, not only in the United States but in other countries as well.

The availability of that expertise is something which we think that the Government, and in particular the Department of Energy, must have in some measure because in terms of storage, and in terms of the emerging oil situation, it is apparent that we are going to have to develop an in-house capability in energy to handle the underground petroleum technology.

Mr. **Collins**. Please let me interrupt. For a year and a half we have not bought any oil. What are they doing down there?

Mrs. **Davis**. The need for underground technology and petroleum engineering for it nationally can be independent of the amount of oil that is available onsite. Thus, the problem is to get these caverns properly developed, to determine how one handles the technology of leaching, of solution mining.

It is the problem of understanding not only the engineering aspects of petroleum but understanding the transportation, the requirements for docking, of handling the environmental problems, of brine disposal as well, problems which not only are unique now in the Department of Energy but, therefore, indicate that we have the sole expertise in being able to handle such problems.

Mr. **Collins**. Let's look at the request for a budget of $2.3 billion. Last year you spent $338 million in your operation and acquired $420 million of oil which was ordered or contracted the year before. Yet now you are asking for three times that much money. That is not anything to boast about. Why?

Mrs. **Davis**. Let me turn that question over in detail to Mr. Jones. Let me simply say one has to take that track record and split it up. I think SPR people have had a good record in terms of being first in developing the physical plant and developing the capabilities for SPR in what I would call a nonbenign environment and in what is fast track without having fast track capabilities at hand.

The areas in which this committee is concerned and in which I have a major concern are to develop acquisition strategies, distribution strategies, the policies for filling and procedures for filling, which are not the responsibility of the line organization that we call SPR. It is in those areas with which you have principal problems.

But to give you the detail, let me turn it over to Harry, who is the Director of SPR.

Mr. JONES. Specifically, the $2.3 billion is a request for reappropriation of moneys which have already been appropriated by the Congress. If we assume that we were to achieve the fill rate which is in the budget, that is 100,000 barrels a day beginning June 1 of this year, through 1981, we would end 1981 with $1.6 billion unobligated.

Should we achieve a fill rate of 200,000 barrels a day during that same period of time, we would essentially have consumed the entire amount of money. So, to not reappropriate the money could place the strategic petroleum reserve in a position of not being able to contract for the oil which we so desperately need to put into the reserve.

Mr. COLLINS. Let me come back. Two years ago, one of the best oil men in Texas, who has been in business all his life, said: "Gentlemen, I do not understand why they are drilling and taking it out of the ground one place and shipping it over and putting it in the ground another place."

I asked the Department at that time and they said, "We get to it quicker and we know how to handle it cheaper." Both proved wrong. They cannot get to it quicker and they cannot get it cheaper.

Why don't we do what he suggested? Why don't we, even on Federal land, make contracts with private drillers who have had experience? Let them drill. Where we find the oil, we could put in the pipeline. If it is to be a strategic reserve, just know where it is and have the well drilled. We would not need to drill all the wells. We could have an approved area.

Why do we have to pump it out and shoot it back into the ground in some old cavern?

Mrs. DAVIS. I believe what you are saying has and does make eminent good sense if you will let me qualify it by saying that it makes eminent good sense in a hierarchial system of oil availability. That would mean indeed at 1 million barrels a day drawdown rate, which we now have from the SPR, that is faster at a drawdown rate than we could generally achieve from storage in the ground in pipelines that were ready to be connected and the like.

I believe, however, that once we have achieved—not the best because that is impossible to determine—but an agreed upon upper limit for what we call the SPR, the next kind of hierarchy for storage, other than expanding the leaching of caverns, would indeed be exactly what you are saying. Keep the oil in the ground, know where it is, have the availability to pump it out, and have it ready for use with its startup period being somewhat related to the total drawdown period of SPR.

I was also in Texas 2 weeks ago and heard exactly the same argument and gave them the answer I gave you.

Mr. **Collins.** I am glad to keep reminding you of it.

Mrs. **Davis.** I think it is an appropriate statement of what I call hierarchial storage. It is someting we will be considering.

Mr. **Collins.** I appreciate your talking to oil people. We get isolated in Washington. There has been a certain attitide up here that we do not need to consult people in the business that have had experience in it, and that we have all the answers in Washington. The more you can visit the field, the more I think we will accomplish.

Thank you, Mr. Chairman.

Mr. **Dingell.** The time of the gentleman has expired. The chair recognizes counsel for the purposes of asking questions.

Mr. **Barrett.** Doctor, there is a section in the budget submission indicating that you are going to reprogram some $15 million from phase II to phase I. Why are you going for reprograming rather than authorization?

Mrs. **Davis.** Let me turn that over to Harry Jones because it has a historical precedent to it.

Mr. **Jones.** The purpose in going for reprograming is because of the timing of the requirement. The $15 million is required this year.

Mr. **Barrett.** You are going to have to restore that $15 million into phase II.

Mr. **Jones.** At the present time we are still expecting the same estimated completion for phase II, so the answer is yes.

Mr. **Barrett.** So, in essence, you are robbing Peter to pay Paul.

Mrs. **Davis.** No, in essence, we are keeping the dollar value the same and changing the time at which we are asking to be able to use the money.

Mr. **Barrett.** What do you need the additional $15 million for in phase I?

Mr. **Jones.** The $15 million represents essentially higher drilling costs. The November 1978 estimates that went into the fiscal year 1980 budget had not had the complete report of the West Hackberry fire. Following that, we made a number of changes to our drilling program, significantly enhanced it from a safety standpoint and, of course, inflation clearly exceeded what was in the budget and collectively that cost us approximately $15 million.

Mr. **Barrett.** But you also had two reprogramings since the West Hackberry fire.

Mr. **Jones.** When the latest estimate was prepared for the fiscal year 1980 budget we had not completed all of the safety designs and so forth for upgrading our drilling program which we have done subsequently.

Mr. **Barrett.** When was the $15 million identified as an extra cost?

Mr. **Jones.** It was during this current budget process, Mr. Barrett. I do not remember the exact review date.

Mr. **Barrett.** Can the Department of Energy, in purchasing oil, pay above the market price?

Mrs. **Davis.** We use the Defense Fuel Supply Center as our purchasing agent and they can pay above the market price.

Mr. **Barrett.** In November, I believe the 15th of November, the distribution plan became effective. Prior to its becoming effective, Mr. Deutsch sent a letter to the committee indicating if more than 6 months went by before there was a distribution that an additional amendment to the plan would be submitted to the Congress before commencing distribution.

I assume that is still your policy?

Mrs. DAVIS. I think it is still our policy but there was an additional letter from John Sawhill delineating how we would handle specific drawdowns and withdrawals. That letter was sent to the committee.

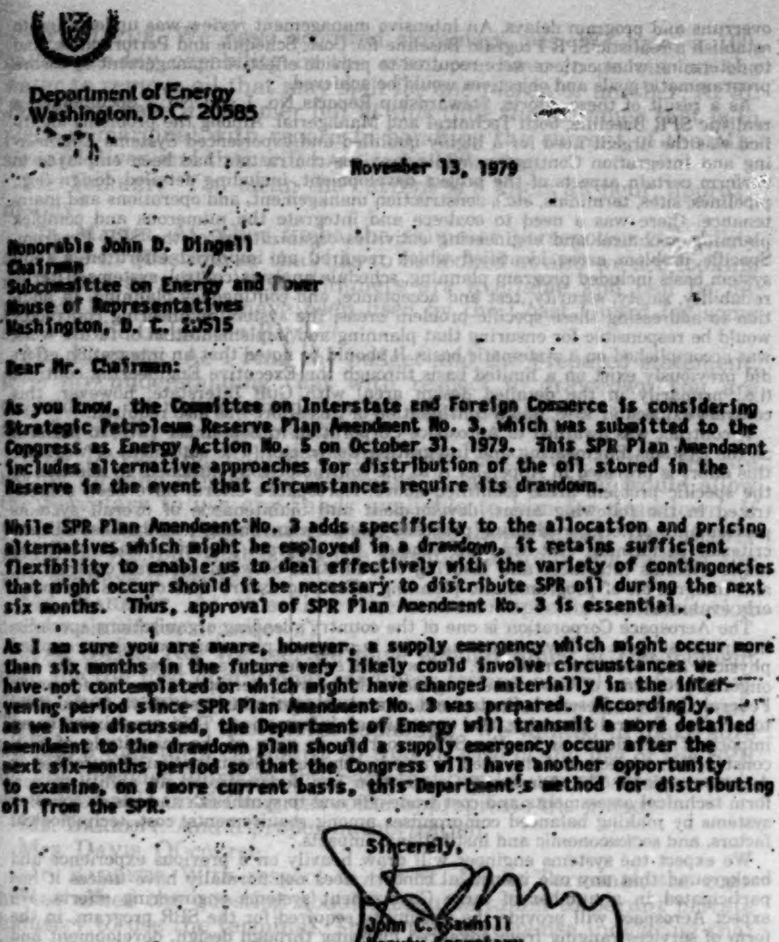
Mr. BARRETT. But it is my understanding there was an indication that the committee would be notified by way of an amendment if there was a distribution plan sometime beyond 6 months.

Mrs. DAVIS. There has not been a policy change and rulemaking is underway for allocation and pricing of oil during drawdown.

Mr. BARRETT. I would like at this time, Mr. Chairman, to introduce a copy of this letter into the record. It is a November 13 letter from Mr. Sawhill whom I had incorrectly identified as Mr. Deutch.

Mr. DINGELL. Without objection, it is so ordered.

[The letter referred to follows:]



Department of Energy
Washington, D.C. 20585

November 13, 1979

Honorable John D. Dingell
Chairman
Subcommittee on Energy and Power
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

As you know, the Committee on Interstate and Foreign Commerce is considering Strategic Petroleum Reserve Plan Amendment No. 3, which was submitted to the Congress as Energy Action No. 5 on October 31, 1979. This SPR Plan Amendment includes alternative approaches for distribution of the oil stored in the Reserve in the event that circumstances require its drawdown.

While SPR Plan Amendment No. 3 adds specificity to the allocation and pricing alternatives which might be employed in a drawdown, it retains sufficient flexibility to enable us to deal effectively with the variety of contingencies that might occur should it be necessary to distribute SPR oil during the next six months. Thus, approval of SPR Plan Amendment No. 3 is essential.

As I am sure you are aware, however, a supply emergency which might occur more than six months in the future very likely could involve circumstances we have not contemplated or which might have changed materially in the intervening period since SPR Plan Amendment No. 3 was prepared. Accordingly, as we have discussed, the Department of Energy will transmit a more detailed amendment to the drawdown plan should a supply emergency occur after the next six-months period so that the Congress will have another opportunity to examine, on a more current basis, this Department's method for distributing oil from the SPR.

Sincerely,

John C. Sawhill
Deputy Secretary

Mr. BARRETT. In September, Aerospace Corp. was awarded a $7 million contract on a sole source basis. They have been given about $1 million so far. Could you supply for the record a detailed explanation of what Aerospace is doing that had not been done by others previously associated with the project and why it was necessary to employ Aerospace? Could we also have a copy of the contract?

Mrs. DAVIS. Yes.

[The following information was received for the record:]

AEROSPACE CORPORATION

In mid-1978, it became apparent to DOE management that the SPR Program would fail to meet its near-term oil fill goals and was experiencing substantial cost overruns and program delays. An intensive management review was undertaken to establish a realistic SPR Program Baseline for Cost, Schedule and Performance, and to determine what actions were required to provide effective management to assure programmatic goals and objectives would be achieved.

As a result of these efforts, Stewardship Reports No. 1 and No. 2 documented a realistic SPR Baseline, both Technical and Managerial. Among the problems identified was the urgent need for a highly qualified and experienced Systems Engineering and Integration Contractor. While previous contractors had been employed to perform certain aspects of the project development, including detailed design (e.g., pipelines, sites, terminals, etc.), construction management, and operations and maintenance, there was a need to coalesce and integrate the numerous and complex planning, technical and engineering activities/organizations of the SPR Program. Specific problem areas identified which required an improved effort on a total system basis included program planning, schedule analysis/control, systems criteria, reliability, safety, security, test and acceptance, and contingency planning. In addition to addressing these specific problem areas, the system engineering contractor would be responsible for ensuring that planning and implementation of future work was accomplished on a systematic basis. It should be noted that an integration effort did previously exist on a limited basis through the Executive Engineering contract (i.e., primarily in the detailed design area) with Gulf Interstate; however, this contract expired in 1978, and a continuation of this effort was also required.

A contract was awarded to Aerospace Corporation in September 1979, to perform as the Systems Engineering and Integration Contractor. The statement of work for this effort is provided in Appendix A to the contractor copy attached. In addition to the specific problem areas identified above, Aerospace's efforts have been concentrated in the following areas: development and maintenance of overall systems performance criteria, evaluating proposed configuration changes against established criteria, performing cost trade-off studies for program/project options, defining major systems interfaces and insuring coordination between involved contractors, and integration of programmatic planning efforts to assure that options are properly evaluated.

The Aerospace Corporation is one of the country's leading organizations specializing in the support of Government agencies in program planning, technology, applied physical and economic research, and system engineering and integration for the ongoing programs of Government agencies. Moreover, Aerospace is a not-for-profit Federal Contract Research Center and as such is particularly sensitive to the need to protect Federal planning and operational information. This sensitivity is an important consideration for the SPR program, in view of the magnitude of SPR construction project, and the need to avoid premature dissemination of purchase or drawdown plans. The Aerospace Corporation has demonstrated an ability to perform technical assessments and cost trade-offs and to synthesize and assess complex systems by making balanced compromises among requirements, cost, technological factors, and socioeconomic and institutional impacts.

We expect the systems engineer will draw heavily on a previous experience and background that any one industrial concern does not normally have unless it has participated in a number of large Government systems engineering efforts. We expect Aerospace will provide the continuity required for the SPR program, in the form of services ranging from advanced planning through design, development and initial systems operation. This has been a characteristic of Aerospace participation in Government programs. The Aerospace Corporation has significant systems engineering qualifications in its charter and is capable of performing large scale systems engineering contracts.

Mr. Barnett. Mr. Mazur, can I ask you about the oil contingency or oil spill contingency plan in St. James at the terminal?

Mr. Mazur. Yes.

Mr. Barnett. Is there such a plan? What is it?

Mr. Mazur. We have at all sites, St. James included, a spill contingency plan. I assume you are referring to what happens in the event of an oil spill.

Mr. Barnett. Into the river, that is right.

Mr. Mazur. We have oil spill contingency plans in place. Documents exist for each of the sites, St. James and others.

Mr. Barnett. You have acquired, in fact, some sort of skimming boat or something.

Mr. **Mazur**. We have acquired skimmers, yes. We have a 100-gallon-per-day capability in the event we have to go out on the water to remove oil that may spill for one reason or another. At St. James we have a skimmer but at this time the skimmer that is in place is marginal with regard to handling the current of the Mississippi River and that will have to be looked at.

Mr. **Barrett**. You mean the current is 8 knots an hour, approximately?

Mr. **Mazur**. At other times the skimmer horsepower capability could be in question, so that has to be looked at and we are looking at it. But at other sites skimmers are available and can be deployed. In fact, they have been used by the Coast Guard for some spills in the Galveston Bay.

Mr. **Barrett**. As I read the budget and the prepared statement, it is my understanding that with respect to drawdown you are depending on reprograming rather than asking for an authorization for money to drawdown?

Mrs. **Davis**. No, I do not think that is correct. What we are asking for, and it is in the statement, is language that would allow the Secretary to use any funds available to him for drawdown. If you call that reprograming within the Department, the answer would be yes, but that is not the specific nature of the request the way we have it written.

Mr. **Barrett**. At this time there is no specific authorization contemplated for drawdown?

Mrs. **Davis**. No. We feel we have enough funds at the moment both for the first operational readiness testing as well as for drawdown that might occur against some scenarios in the next year. That, however, is a short-term capability. We wanted to make sure we had a long-term capability so that in case of the use of the SPR for its intended purpose the Secretary could use whatever funds were available until Congress could appropriate the money.

Mr. **Barrett**. And a proper authorization.

Mrs. **Davis**. Of course.

Mr. **Barrett**. With respect to the St. James Terminal, the committee asked the question about measures taken to permit private industry to use the terminal. There was a response indicating that there has been some interest by industry in using the terminal. Could you elaborate on that?

Mr. **Jones**. I will elaborate on what we are doing. I will let Don talk to you about interest that has been expressed. We are looking at the legal aspects of use of all these SPR facilities for commercial uses, specifically with respect to the St. James Terminal. The permit under which the terminal was allowed to be constructed assumes, as does the environmental impact statement, only intermittent use during fill of the facilities and during draw down and specifically does not allow for continued use as a commercial facility.

Therefore, assuming there are no legal problems associated with it and it was determined to be desirable to enter into some commercial arrangement, it would require an environmental impact statement. To go through the process would take something like 12 to 16 months.

Mr. **Barrett**. Has an environmental impact statement been started yet?

Mr. **Jones**. No, sir. Not for that.

Mr. **Barrett**. I understand people like Exxon have approached SPR and asked to store oil.

Mr. **Mazur**. At St. James we have two docks and 2 million barrels above ground storage. The interest that has been expressed by large companies, not a lot but one or two, is primarily with the use of the above ground storage. We have not been approached officially or unofficially that I know of with regard to docks.

We have had in addition other requests for usage of our pipelines, in particular the pipeline from St. James to Bayou Choctaw. We had a couple of inquiries of whether or not private corporations could tap into our pipelines and use that pipeline transport for their use. We get from time to time letters of that nature, nothing more than that at this time.

Mr. **Sharp**. Do you have legal authority to contract out and let them use it and make money off of those facilities? Is there legal authority available for you to do that?

Mr. **Jones**. We have asked general counsel to address this issue. I cannot answer the question. Of course, the funds so generated would be paid directly to the Treasury, not to the strategic petroleum reserve.

Mr. **Dingell**. When could you inform us? This question was asked by the committee in September. When was this question asked of general counsel?

Mr. **Jones**. We should be able to respond to you in approximately 2 to 3 weeks.

Mr. **Dingell**. I am going to ask specifically that you inform the committee at the earliest minute for inclusion in the record as to whether or not you need additional authority to afford of this pipeline capacity to commercial interests for commercial purposes.

I am going to ask specifically that you inform us, if you need authority what authority you need; if you do not need authority, what authority do you cite, and that if you do propose to rent this space, this pipeline capacity, in what fashion would you rent it?

[The following response was received for the record:]

Department of Energy
Washington, D.C. 20461

April 9, 1980

Honorable John D. Dingell
Chairman, Subcommittee on
Energy and Power
Committee on Interstate and
Foreign Commerce
House of Representatives
Washington, D.C. 20515

Dear Mr. Dingell:

During our testimony before the Subcommittee on Energy and Power, House Committee on Interstate and Foreign Commerce on February 12, 1980, you asked whether sufficient legal authority exists to enable the Department of Energy (DOE) to afford use of the St. James Terminal or other Strategic Petroleum Reserve (SPR) facilities for commercial purposes. This information is to be inserted in the record for the hearing along with the information regarding the SPR Program which has already been submitted to you.

DOE's General Counsel has concluded that, within limits, legal authority exists under the DOE Organization Act, Public Law 95-91, and the Energy Policy and Conservation Act (EPCA), Public Law 94-163, for DOE to contract to permit use of the St. James Terminal or other SPR facilities by industry.

Section 159(f)(D) of the EPCA authorizes the Secretary of Energy to "use, lease, maintain, sell, or otherwise dispose of" SPR storage and "related" facilities (defined in section 152(8) as including necessary appurtenances, among them pipelines). Leases are expressly authorized; although the term "otherwise dispose of" is undefined, we believe it authorizes service contracting to effectuate the use of SPR facilities. This authority is granted "to the extent necessary or appropriate to implement" the SPR Plan. It would not seem essential that contracts for the incidental use of SPR facilities be discussed in the SPR Plan; however, if a significant program for the commercial use of SPR facilities were proposed, it probably ought to be detailed in a Plan Amendment.

Also, pursuant to section 649(b) of the DOE Organization Act, the Secretary of Energy is authorized to permit private use of any real property, or any facility, under the custody of the Secretary for Department purposes. The Conference Report on this provision indicates that there must be a Departmental function which would be facilitated by the proposed private use, such as SPR equipment maintenance. See H.R. Conf. Rep. No. 95-539, 95th Cong., 1st Sess. 97 (1977). Section 646(a) further empowers the Secretary to enter into and perform such contracts, leases or other similar transactions as he may deem necessary or appropriate to carry out functions vested in him.

There are environmental considerations, including the question of an environmental assessment or impact statement to satisfy the requirements of the National Environmental Policy Act, which must be taken into account before the facilities can be used by private industry. The environmental impact statement which addressed construction of the St. James Terminal assumed only intermittent use during fill and drawdown. Use of the facilities by private firms will mean increased hydrocarbon emissions and an increased risk of oil spills. An assessment of these impacts must be undertaken to determine whether a supplement to the original impact statement is required. In addition, the same assumption of intermittent use was made in applying for the permits necessary to operate the facilities. Greater use of the facilities will mean increased hydrocarbon emissions within an area in which hydrocarbon emissions exceed the national ambient air quality standards and which EPA and the State of Louisiana have designated as nonattainment areas. Expanded use of the facilities may require new permits and offsetting decreases in other emissions in order to avoid further deterioration of the local air quality.

Proposals for commercial use of SPR pipelines raise a question concerning the regulatory status of the pipelines. In informal discussions with the Office of General Counsel of the Federal Energy Regulatory Commission (FERC), which has jurisdiction to regulate common carrier pipelines, a serious question has arisen as to whether SPR pipelines will be "common carriers" under the Interstate Commerce Act if they are used by private shippers, with the possible result that the Government would not have unimpeded use of its pipelines to carry out the missions for which they were built. While DOE's Office of General Counsel is of the view that the SPR pipelines are not and legally should not become subject to the Interstate Commerce Act, notwithstanding such usage, the lack of legal clarity is a serious constraint on such use and permitting industry to use SPR pipelines would seem imprudent.

We do not consider the above problems or constraints insurmountable. At the same time, we do not consider the commercial use of the St. James Terminal appropriate until the system has been completely tested, charged with crude oil and accepted by the Government. We will explore this matter with industry, on an informal basis, to determine the extent of interest on their part as to utilizing selected SPR facilities. We will keep you advised of our progress in this area.

Sincerely,

Ruth M Davis

Ruth M. Davis
Assistant Secretary
Resource Applications

Mr. **Dingell**. Frankly, I think it probably would be a good deal all around if you were to rent it under proper circumstances so the taxpayers could get something back on the investment they made in the pipeline. I am sure my good friend from Indiana concurs and I think that is why he was asking the question which is the reason counsel is asking the questions.

It strikes me parenthetically the request of this subcommittee in September, raised today, and honored 3 weeks hence is hardly to be classified as a timely response. The Chair recognizes counsel again.

Mr. **Sharp**. Could I interrupt with another question, not immediately related but with respect to the 750-million-barrel goal? What is the anticipated rate at which that could come out in a crisis time? The existing rate, I understand, is 1 million barrels a day? Would that be different from a million barrels a day?

Mrs. **Davis**. It would be different. It is between 4 and 5 million barrels a day. When we get to the 500-million-barrel intermediate level, it will be at about 3.5 million barrels a day, so it goes up 1 million now to about 4.5 million with the 750-million-barrel reserve.

Mr. **Sharp**. Thank you, Mr. Chairman.

Mr. **Dingell**. The Chair thanks the gentleman. The Chair recognizes counsel again.

Mr. **Barrett**. Doctor, the question was asked, what disposition will be made of the $2.4 million earmarked for strategic planning and analysis? The response that was supplied indicated that SPR has established a strategic planning and analysis division and that the $2.4 million will be used to acquire contractor support for the preparation of major studies and analysis planning pertaining to SPR size, oil acquisition and the key planning perimeters.

My question is: Isn't this a major policy issue? And if it is a major policy issue, why is this being contracted out rather than performed within the Department?

Mrs. **Davis**. The size of SPR and acquisition strategy, et cetera, are indeed major policy issues. With every major policy issue there is a requirement to develop procedures either to implement that policy or, form policy options from which we can select.

This activity, then, is not aimed at policymaking, which is the responsibility of DOE management, but at developing the procedures and the ramifications of the different alternatives we have for presentation. That I think is a legitimate way to build up the data base from which we can indeed make policy decisions.

Mr. **Barrett**. For instance, you already contracted out and have gotten back two studies with respect to the proper size issue. I would assume you do not need any more contracts on that. On oil acquisition, there was a memo recommending a program back in June of 1979. I do not know that you need contractor support on that.

What I really would like to know is, what is unique about that $2.4 million contractor support that cannot be done in-house and that should not be done in-house? I would like a specific response for the record with respect to that.

Mr. **Dingell**. Without objection, that response will be inserted in the record at the appropriate point. The record will remain open for the receipt of it.

In preparing that response, I would like you to make sure it is prepared in light of the OMB circular and Department of Energy position paper with respect to contracting out on policy decisions.

[The following information was received for the record:]

CONTRACTOR SUPPORT

Work needs to continue on planning and analysis of Strategic Petroleum Reserve issues even though much work has been done in the past. As noted in the FY 1981 budget, the decision on Phase III will be in the FY 1982 budget process, and there have not yet been decisions on the timing and composition of the fourth 250 million barrel increment, and we need detailed analysis in support of these decisions. Furthermore, the major planning perimeters of the Strategic Petroleum Reserve such as size, drawdown rate, crude oil mix, etc. have been derived from analyses of domestic and world oil market conditions, current and projected. As conditions and forecasts change, SPR analyses revision and updating.

Using private industry entities to support Strategic Petroleum Reserve planning and analysis efforts will be consistent with OMB Circular A-76, Policies for Acquiring Commercial or Industrial Products and Services for Government Use and with Departmental policies and procedures to implement that Circular. Private contractors will not perform "basic functions of management" for the Strategic Petroleum Reserve as defined in the Circular, nor will private contractors make policy decisions concerning the SPR. Rather, private contractors will collect and analyze information for Federal policy makers to assess the relative advantages of available policy alternatives.

The data collection and analysis which would be performed by private industry have characteristics which suggest the advisability of using commercial sources rather than Federal employees. For example many of the studies which we contemplate will be of a one time nature. Others will be repeated, but they will involve intervals of a year or more. A number of the tasks planned require very specialized expertise, and other require specialized or proprietary computer software. Under these circumstances, the conditions for establishing a full-time Federal work force to provide such services under the terms and conditions of Circular A-76 do not exist. Commercial sources are normally available, their use may not materially delay or disrupt the program, and the cost to the Government may not be higher.

In summary, we need continued efforts on strategic planning and analysis relative to the Strategic Petroleum Reserve, and we will use commercial sources to perform data collection and analysis within the intent and letter of government policies without abrogating the responsibilities of Department officials for policy development and management of the SPR activity.

Mr. BARRETT. On the negotiated turnkeys, what is the status of those three projects? I notice there is no money in the 1980 budget for those.

Mrs. DAVIS. On negotiated turnkeys the activity has stopped on two of those and evaluation of the third one has not been completed. We are not at the moment planning to utilize the turnkey route for phase III.

Mr. BARRETT. How much has been spent to date on turnkey? I notice something like $210 million earmarked in last year's budget. Has that been actually spent or has most of that not been spent?

Mrs. DAVIS. I would have to refer that to Mr. Jones.

Mr. JONES. We asked for that in the reprograming but we did not get the money.

Mr. BARRETT. So, in essence, none of it has been spent?

Mr. JONES. No.

Mrs. DAVIS. I would rephrase that, if I might, to say there was no money available for that.

Mr. BARRETT. Is the SPR still expediting construction at this point or has there been a general slowdown?

Mr. JONES. Where available engineering or where schedules, if rearranged, would result in a cost savings we have done so. We have not continued to meet the original milestones if it would cause increased cost and where cost savings could be realized we have adjusted the schedules.

Mr. BARRETT. At this point, are you paying a premium for expediting construction or not?

Mr. **Jones**. I am not aware of any premium that is being paid for expediting construction.

Mr. **Dingell**. Would you check that statement out and submit an answer on that point for the record?

Mr. **Jones**. Yes.

[The following response was received for the record:]

Premium Payments

Since the oil fill curtailment in August of 1979 there have been no contract accelerations requiring premium payments. As a normal practice most of the construction contractors employed on the SPR project work a six-day, 10-hour per day week. These contracts are fixed price competitive awards, and the six day 10 hour week is part of the package price. This is not a requirement of the SPR or its construction manager; it is simply an industry practice used as a means to attract a qualified stable work force.

Mr. **Dingell**. It strikes me at the rate you are proceeding to acquire oil and at the rate you plan to acquire oil, to expedite construction would be indefensible if you had to pay a premium for it. The Chair recognizes counsel again.

Mr. **Barrett**. One of the issues the committee raised a question about last year involved property management, property custodian and I understand DUCI has been appointed as property custodian; is that correct?

Mr. **Mazur**. DUCI has security responsibility for all the sites. What they have done is consolidate our security force, enhance the security force, provide a professional work force, increased the manpower in terms of that guard force and are in the posture of assuming the property acquisition from the construction contract. There is greater discipline at the gates, badging—we are badging all the contractors to a common badge system.

At the entrance to the site, incoming and outgoing vehicles are checked. That is from a DUCI standpoint.

Mr. **Barrett**. You say "assuming," I assume that means it is not completed yet. When did they start?

Mr. **Mazur**. It has been in the course of the middle of 1979, as the construction aspect of the job winds down and the transference of property accountability responsibility from the construction manager to the operating contractor through the DOE takes place. That will be ongoing for some time. It is in process slowly but it is ongoing.

Mr. **Barrett**. DUCI would be responsible then for the security of all property on the sites?

Mr. **Mazur**. As it phases from construction to an O. & M. function, that is correct.

Mr. **Dingell**. The Chair is going to recognize my colleague for additional questions, the gentleman from Texas, Mr. Loeffler.

Mr. **Loeffler**. Thank you, Mr. Chairman.

Madam Secretary, I would like to pursue further—because I believe you missed the point—my last question at the conclusion of my time earlier. That is, would you briefly describe the withdrawal or distribution plan from the SPR system, not in the sense of what might be available to us, as a nation, on Federal land or Federal properties, OCS, et cetera.

Mrs. **Davis**. Withdrawal plan from SPR, I would be glad to have Harry address that directly.

Mr. Jones. The withdrawal plan addresses the methods under which the oil might be sold or allocated and the pricing primarily.

Mr. Loeffler. What are those methods?

Mr. Jones. The methods that have been under consideration are the existing mandatory crude oil allocation programs, special allocation programs that would allow supplies to be targeted directly for special needs, such as access to the Department of Defense or for a local shortage, and competitive sale.

Mr. Loeffler. I suppose you are also taking into account the regional needs of the country in the allocation plan?

Mrs. Davis. Absolutely.

Mr. Loeffler. Did you indicate to counsel that a more detailed plan would be submitted by May? Is that my understanding?

Mrs. Davis. We responded in a letter from John Sawhill that said that we would respond, not at a given time, but in terms of requirements for a specific drawdown based on a specific emergency scenario. That is the letter of November 13.

Mr. Loeffler. This is before a final decision will be made, so that this subcommittee can have input with respect to various facets of the distribution plan?

Mrs. Davis. That is the intent.

Mr. Loeffler. I would like to reiterate your earlier testimony concerning the fact that there must be coordinated policies within the Department of Energy, and also with the Department of Interior, OMB, Domestic Counsel, et cetera.

It seems to me to be a large undertaking and one that we on the subcommittee believe is an important undertaking. Yet, at the same time, the Department of Energy moved the SPR program from an Under Secretary position to the slot of Deputy Assistant Secretary.

Can you explain the rationale behind that?

Mrs. Davis. Yes, I can. I do not think it is rationale. I think it is good management and I indicated at the moment there were three major facets to what I would call the strategic petroleum reserve program. One of those is policy intensive and is being handled by the Secretary himself in conjunction with the Deputy Secretary, Under Secretary, myself, the General Counsel and other Presidential appointees as required.

That is part of the SPR program and is being handled at the Secretarial level.

The second important facet of the three facets of the SPR program is to carry out implementation of the policy, recommendations for policy change, and the transition between policy and line management and that occurs through and by me.

The third facet of the SPR program is the actual operation of the physical facilities and handling and management of the physical plant, which makes up SPR as well as the actual handling, not of the strategy for acquisition but the handling of the tankage and the pipelines, et cetera, keyed to acquisition, distribution and the like.

That kind of function is a line organization function. It is one where there has to be continuity of direction. There has to be stability of management.

It appropriately belongs in the line organization of the Department because it is not involved with policy and an area this important deserves the attention of senior line management. That is the responsibility of the Deputy Assistant Secretary for SPR and the entire line organization that reports to Harry Jones, who in turn reports to me.

So I think the Department has made excellent accommodation to simultaneously handle policymaking for the SPR program, policy implementation and procedural developments and simultaneously putting in the proper location a line organization, the actual SPR facility, which is a physical plant and the management of that physical plant.

Mr. LOEFFLER. During the course of our hearings in 1979, it came to our attention that the Department of Energy had not yet developed, or contracted for the development of the actual equipment which might withdraw oil from the SPR. Do you now have the actual equipment or the technology with which to withdraw the oil that will be placed, and which has already been placed, in the strategic petroleum reserves?

Mrs. DAVIS. Yes, we have for the oil that is in place the equipment, including the pumps that were referred to in that specific statement, so that we can draw down in the three facilities in which oil exists at the required rate of 1 million barrels a day.

I indicated we have done operational readiness tests between the period of August and January of this past year and the phasing from now on, now that the program and the facility management is in place, the phasing of the equipment for drawdown acquisition and the like is as it should be and, therefore, when the oil is in place, this also will be the drawdown capability.

Mr. LOEFFLER. Thank you, Mr. Chairman.

Mr. DINGELL. The Chair thanks the gentleman. The Chair recognizes the gentleman from Massachusetts, Mr. Markey, for 5 minutes.

Mr. MARKEY. Thank you, Mr. Chairman.

In your draft SPR amendment the regional petroleum reserve is described as providing for storage of residual fuel oil for substitute refining petroleum products for the U.S. east coast.

Are there any special considerations that have to be taken into account for the storage of refining products that the DOE is now undertaking so that it will be practicable for them to be able as quickly as possible to have that storage capacity made possible and know that the refined product, which clearly does not have the same problems in storage as the crude product does, would be able to be stored in the region?

Mrs. DAVIS. As you indicated, refined and crude have different storage capabilities and the site investigation that was initiated and on which I reported in New England has considered the kind of storage needed for the requirements of region storage for residual oil, for example.

Mr. MARKEY. Do you think DOE at this time has the kind of specialized knowledge that makes it possible to make an expert judgment as to the practicalities of storage?

Mrs. DAVIS. I would say straightforwardly DOE has access to that kind of specialized knowledge while the Government as a whole never has all of the specialized knowledge it needs, it has access to it through contractors, grants, consultants, and I feel quite comfortable about getting access to that kind of specialized knowledge without our having to hire it per se.

Mr. MARKEY. Is that access now being taken advantage of? Do you now have outside people who have this kind of expertise contracted for and consulting with DOE so you can have a full appreciation and work as expeditiously as possible to have that regional petroleum reserve in operation?

Mrs. DAVIS. It is my understanding we do not have funding yet for the regional reserve program other than some specific activity we have underway, but let me ask Harry to answer you more directly.

Mr. JONES. We do not specifically have any outside consultant involved. I do have one individual who is very knowledgeable and experienced in product quality. And, there are others of us in the strategic petroleum reserve who also have experience in these areas.

The question of storage is one of frequency of replacement. Unless you have residual which would create some other unique problems. Those problems are being investigated, but those are primarily design problems.

Mr. MARKEY. So, you are satisfied that you have that capacity?

Mr. JONES. I am satisfied that we are progressing at this time.

Mr. MARKEY. Let me ask, Madam Secretary, the regional petroleum reserve amendment—when is it to be submitted? In other words, is it ready to be submitted immediately after the passage of the windfall profit tax?

Mrs. DAVIS. We will submit it immediately after the passage of the windfall profit tax.

Mr. MARKEY. Will there be any change in the draft?

Mrs. DAVIS. I suspect so. I would hope that we would have done more investigation on sites in New England and have because we are continuing to look at this. So, I would assume and anticipate and request from the SPR office that it be more specific than it is now.

Mr. MARKEY. What kind of criteria will govern site selection?

Mr. JONES. The same criteria that we have used in the past. That is cost, access to distribution capability, safety, security, criteria such as those.

Mr. MARKEY. Will the process be open to bid or is DOE going to do this?

Mr. JONES. We have a business strategy group which is currently addressing the procurement methodology that would be used in each of the three areas, the two noncontiguous areas and the regional.

Mr. MARKEY. So, you don't have a policy?

Mr. JONES. We have not yet established a procurement methodology for acquisition of the sites.

Mr. MARKEY. How soon after funding is passed do you expect to have a regional petroleum reserve operational in New England? What is the time frame that we can look toward a target to know we have a secure regional petroleum reserve in New England?

Mrs. DAVIS. We don't have a target date because there are too many uncertainties that we have not answered yet, such as the availability of sites, the environmental impact statements, and the availability of transportation so that we don't have——

Mr. MARKEY. We can still be another 10 years away as far as having a real regional petroleum reserve?

Mrs. DAVIS. No, I don't think so in any way. We weren't 10 years away in SPR.

Mr. MARKEY. We are 5 years away from the promise and we still have not made any progress. Are we talking about 2 years, 3 years, 5 years, 8 years?

Mrs. DAVIS. We are talking less then 5 years.

Mr. DINGELL. The time of the gentleman has expired. The Chair recognizes counsel.

Mr. WHITENTON. Could we have clarification for the record concerning regulations pertaining to sale of naval petroleum reserve oil? Could you verify whether it is true that the naval petroleum reserve regulations do or do not prohibit changes of NPR oil for overseas cargo? That is a firm that buys NPR oil could exchange that oil for Saudi Arabian right out in the Persian Gulf and thereby backing out imports that would otherwise be coming in to the United States?

Mrs. DAVIS. We will get a counsel decision on that.

Mr. WHITENTON. Could that be submitted for the record?

Mr. DINGELL. Without objection, that will be inserted in the record.

[The following information was received for the record:]

NPR EXCHANGE OIL

For Naval Petroleum Reserves (NPR) oil to be exported outside of the United States it would be necessary to comply with the requirements of Section 201(11) of the NPR Production Act of 1976 (10 U.S.C. Section 7430(e), and the Export Administration Act of 1979, Pub.L. 97-72 (Sept. 29, 1979) and regulations issued thereunder, all of which mandate a Presidential finding. If transportation away from the NPR sites involves use of pipelines described in section 28 (u) of the Mineral Lands Leasing Act, 30 U.S.C. section 185 (u), additional Presidential findings must be made.

Section 201(11) of the Naval Petroleum Reserves Production Act of 1976, 10 U.S.C. 7430(e), provides that:

> Any petroleum produced from the naval petroleum reserves, except such petroleum which is either exchanged in similar quantities for convenience or increased efficiency of transportation with persons or the government of an adjacent foreign state, or which is temporarily exported for convenience or increased efficiency of transportation across parts of an adjacent foreign state and reenters the United States, shall be subject to all the limitations and licensing requirements of the Export Administration Act of 1969 . . . and, in addition, before any petroleum subject to this section may be exported under the limitations and licensing requirement and penalty and enforcement provisions of the Export Administration Act of 1969, the President must make and publish an express finding that such exports will not diminish the total quality and quantity of petroleum available to the United States and that such exports are in the national interest and are in accord with the Export Administration Act of 1969.

The Export Administration Act of 1969, 50 U.S.C. App, section 2401 et seq. was replaced by the Export Administration Act of 1979, Pub. L. 96-72 (Sept. 29, 1979). Under the authority of 50 U.S.C. App. section 2403 (b) (1), rules and regulations were promulgated by the Department of Commerce to the extent necessary to protect the domestic economy from the drain of scarce materials.

The regulations adopted were the "Short Supply Controls," 15 C.F.R. Part 377. It appears that these promulgated regulations are controlling in the absence of new regulations, to the extent they do not conflict with the 1979 Act.

Section 377.6(d) of these regulations addresses the issuance of export licenses which any firm involved in an exchange for NPR oil would have to obtain in order to export the NPR oil. The regulations state that to obtain a license to export, such export must be consistent with the national interest and with the purposes of the Energy Policy and Conservation Act, Pub, L.94-163, 42 U.S.C. Section 6201 et seq. Section 160(a)(3) of the Energy Policy and Conservation Act, 42 U.S.C. section 6240(a)(3), provides that:

> The Secretary is authorized for purposes of implementing the SPR plan . . . to place in storage, transport or exchange . . . petroleum products acquired by purchase, exchange or otherwise,

An export of NPR oil would not be inconsistent with this or other provisions of the Energy Policy and Conservation Act. However, sub-paragraph (d) iii of the regulations further conditions permission to export NPR oil on the following Presidential finding:

> If the crude or partially refined petroleum was produced from a Naval Petroleum Reserve but has not been and will not be transported by pipeline over a federal right-of-way granted pursuant to section 28(u) of the Mineral Leasing Act of 1920, and the President makes and publishes an express finding that the export(s) will not diminish the total quantity or quality of petroleum available to the United States and that such export(s) are in the national interest and are in accord with the Export Administration Act of 1969.

Section 28(u) of the Mineral Leasing Act, 30 U.S.C. section 185(u), provides that:

> Any domestically produced crude oil transported by pipeline over rights-of-way granted pursuant to this section . . . shall be subject to all of the limitations and licensing requirements of the Export Administration Act of 1969 and, in addition, before any crude oil subject to this section may be exported under the limitations and licensing requirements and penalty and enforcement provisions of the Export Administration Act of 1969 the President must make and publish an express finding that such exports will not diminish the total quantity or quality of petroleum available to the United States, and are in the national interests and are in accord with the provisions of the Export Administration Act of 1969 . . .

Transportation away from Naval Petroleum Reserve sites to affectuate the exchange might involve transportation by pipeline over rights-of-way granted by the Mineral Leasing Act, as one of the pipelines away from the Elk Hills NPR site is located on such a right-of-way. We have not attempted to ascertain what other Section 28(u) pipelines might be utilized in exporting NPR Oil.

If the NPR oil were transported over such a right-of-way, there are two other Presidential findings in addition to the findings that such export will not diminish the total quality and quantity of petroleum available and that such exports are in the national interest, Section 377.6(iv) of the Commerce Department's regulations states that the export of crude or partially refined petroleum which has been or will be transported by pipeline over rights-of-way granted pursuant to section 28 is permissible if the President makes and publishes an express finding that the export of such crude or partially refined petroleum:

> (b) will have a positive effect on consumer oil prices by decreasing the average crude oil acquisition costs of refiners. . .
>
> (c) will be made only pursuant to contracts which may be terminated if the petroleum supplies of the United States are interrupted or seriously threatened. . .

Mr. WHITTINGTON. One other comment on the congressional budget request. In terms of estimated total cost of the oil that it would take to put 750 million barrels into the reserve, the DOE estimates it would cost $35 billion. You are using a $29 per barrel delivered price for 1980 with increases beyond 1981 at the rate of inflation plus 2.5 percent real growth.

Given the President's decontrol program, the volatile price on the world market, and high bids already received for NPR oil, doesn't the DOE estimate seem a little low for the total cost and does the same justify a slower fill rate for this year than might otherwise be prudent?

Mrs. DAVIS. I would separate those questions. I don't think those estimates justify a slower fill rate this year. When one is in an increasing inflationary cycle and one is using fixed indexes of escalation, whether by a company or by OMB, one generally tends to fall behind in cost estimates—meaning the cost estimates are conservative. That is something with which we all live within an inflationary cycle.

Mr. DINGELL. The Chair observes that you have submitted a statement with regard to the Department of Energy uranium enrichment activities and uranium resource assessment programs for which we thank you.

Also, you have submitted to us responses to questions of a letter from the Chair to Secretary Duncan, for which we also thank you. Without objection, both of these will be inserted in the record at this point. And, the Chair recognizes counsel for purposes of questions on these matters.

[Testimony resumes on p. 420.]

[The material referred to follows:]

DETAILED STATEMENT

Statement of
Ruth M. Davis
Assistant Secretary
Resource Applications
U. S. Department of Energy
Before the
Subcommittee on Energy and Power
of the
Committee on Interstate and Foreign Commerce
U. S. House of Representatives
Fiscal Year 1981 Authorization Hearings
February 12, 1980

I. Introduction

Mr. Chairman, I am pleased to have this first opportunity to discuss with you the Department of Energy's (DOE) Uranium Enrichment Activities and its Uranium Resource Assessment Programs.

My emphasis in this statement will be on the major functions of the program, actions of importance which have occurred in the last year, and on the current status and thrust of our uranium enrichment and resource assessment programs. As a newcomer of just over two months to this job, I am nevertheless aware of the previous statements you have heard and of your individual and collective expertise. I hope to be the recipient of it as a major input to our programs.

II. Major Functions of the Uranium Enrichment and Resource Assessment Activities

I consider the major functions of these programs to be:

(1) to supply all defense requirements for highly enriched uranium,

(2) to be the sole supplier of all needed enrichment services to domestic civilian nuclear reactors, i.e., primarily electric utility reactors,

(3) to be a principal supplier of enrichment services to non-U.S. (free world) utilities,

(4) to produce these services utilizing the most reliable, safe and cost-effective technologies available, and

(5) to develop and disseminate timely, comprehensive, and reliable information on the magnitude, availability, and economics of U.S. uranium resources and to participate in international efforts to evaluate foreign uranium resources.

Let me now address each of these functions briefly.

We have been supplying all of the highly enriched uranium requirements for the naval nuclear propulsion fleet since 1957. These requirements have essentially been at a steady state level for the past several years and represent about 10 percent of our current annual production. Although there has not been a new production requirement for the weapons program since 1964, if requirements were to increase in the future, they would have our highest priority.

We are the sole supplier of all enrichment services to domestic civilian reactor customers; we have been since 1957, when Shippingport started up as the first U.S. power reactor. Up until recently, there has been no competition for the U.S. market. However, URENCO and EURODIF now have sales representatives in Washington who are seeking a share of the U.S. enrichment business. About 98 percent of the U.S. buyers are electric utilities, with the remaining 2 percent or less being used in research reactors.

To be an effective sole supplier of all enrichment services to domestic civilian reactor customers we need to 1) have credible estimates of future demands, 2) recognize that credible estimates are difficult because this marketplace demand is highly influenced by factors external to the marketplace such as regulation and public policy, 3) produce slightly ahead of demand believing the risk of slight oversupply to be less than undersupply, and 4) attempt to mitigate the periodic increases in enrichment service charges called Separative Work Unit (SWU) charges by incorporating improved technology into our enrichment plants.

I shall deal with estimates of future demand later, as well as discussing production rates.

We have many reasons for wanting to be a principal supplier of foreign enrichment needs. These reasons include:

1) to exert the maximum influence on foreign users to cooperate in our nuclear non-proliferation objectives and obtain enriched uranium from the U.S. rather than developing an indigenous supply capability which could also be a source of weapons material;

2) to obtain the benefits from this program in U.S. balance of payments; and

3) to optimize the use of available capacity in order to minimize the cost for all customers.

Indeed, as was told to you last year in statements on this same subject, the President stated in 1978 "The United States must restore confidence to the world in its ability and willingness to supply enriched uranium services for commercial applications." This presumes a real concern over the image of the U.S. as a seller in the international marketplace of enrichment services. Today we see the following non-U.S. suppliers in the international market along with their marketplace service capacity.

FOREIGN SELLERS OF URANIUM ENRICHMENT SERVICES AND THEIR ENRICHMENT CAPACITY

Supplier	Capacity (Millions of SWU/YR)
USSR	3 to 4 available for export now
URENCO	0.4 operating; 2.0 committed; 10.0 possible by 1990
EURODIF	2.2 operating; 10.8 committed, which should be operating by 1982
COREDIF	no current capacity; 10.0 possible by 1990
Japan	0.01 operating; 0.05 committed; 2.5 possible by 1990
Brazil	no current capacity; 0.2 possible by 1985

Internationally, the buyers from the U.S. are shown in Chart 1. The U.S. is experiencing a decline in the share of enrichment services which it furnishes in the world market place. Some foreign customers have switched from DOE to EURODIF, URENCO, and the Soviet Union. Some of the new business is expected to go to the foreign suppliers rather than to the U.S. This concerns us. In order to reverse this trend, we are visiting our foreign customers to demonstrate our desire to meet their enrichment requirements on terms which we believe are more favorable than our competitors are offering.

To provide assurance to our domestic and foreign customers that the U.S. is the most economical and reliable source of enriched uranium we are working with all available technologies. Specifically, we have underway a major effort utilizing gaseous diffusion technology, gas centrifuge technology and DOE is funding research and development in advanced isotopes separation technology.

The Cascade Improvement Program (CIP) and the Cascade Uprating Program (CUP) are currently the most economical means available in the U.S. for increasing its uranium enrichment capacity. The CIP increases capacity by improving the efficiency of the existing gaseous diffusion plants through incorporation of the latest gaseous diffusion technology. Capacity added by the CIP is obtained at a unit cost of only $17 per separative work unit (SWU) with no increase in operating costs. The CUP increases the capacity of the CIP improved plants by effectively utilizing additional amounts of electrical power. The capacity added from this program is obtained at a low cost of $54 per SWU assuming a cost of 20 mills per kilowatt hour for power.

To provide further assurance to our domestic and foreign customers that the U.S. is the most economical and reliable source of enriched uranium, we are committed to completing the first 2.2 million SWUs of the Gas Centrifuge Enrichment Plant (GCEP) by 1988. This will permit GCEP to be operated integrally with our gaseous diffusion plants, and moreover bring to the enriched uranium marketplace the prominent advantages of the centrifuge separation process. These centrifuge advantages include: 1) operation using only 5 percent of the power of the diffusion process; 2) adaptability to construction in increments consistent with market expansion; and 3) opportunity to develop and utilize second generation centrifuges which promise even more attractive economics when fully developed in the mid to late 1980s.

In addition a major research and development effort is underway in Advanced Isotope Separation (AIS) Technology. One plasma separation and two laser methods are under evaluation in DOE's research and development program.

The primary motivation for continuing our Uranium Resource Assessment Program remains the same as we have outlined before: namely,

- to provide assurance of adequate domestic uranium supplies for current and planned light water reactors.

- to provide a measure of the light water reactor capacity supportable from domestic uranium supply over the long term.

- to provide a basis for timely and economic decisions regarding the development and deployment of other energy technologies, such as reprocessing, recycle of uranium and plutonium, and advanced reactor designs.

- to provide assurance to other countries of the adequacy of uranium supplies so that premature or unnecessary use of technologies that can lead to weapons proliferation can be avoided.

These activities lead to an expanded U.S. resource position, a strong capability to meet our future needs for domestic supplies, and a sound technical basis for energy planning by government and industry.

The uranium resource assessment program has a history of providing sound, well founded data that goes back to the days of the Atomic Energy Commission. The findings have been the basis for long-range nuclear planning by the government, and for planning by the utilities and the uranium producing companies. Recently the information has had a key role in the Non-proliferation Alternative Systems Assessment Project (NASAP) and the International Fuel Cycle Evaluation (INFCE).

Resource assessment is a proper government activity as it requires studies with a much longer time frame than is typical of industry programs and it also involves types of resources not being actively investigated by industry.

III. Important Actions of FY 1979 and FY 1980

A. Managerial

Actions to strengthen the management of the uranium enrichment program were undertaken last year primarily through the reorganization of the DOE Office of Uranium Resources and Enrichment. A Division of Business and Marketing Operations was established to more closely integrate budget, operational planning, pricing and marketing activities. This organizational change is intended to provide comprehensive business support for management of uranium facilities, products, and transactions. This support will be further enhanced through establishment of a revolving fund for the financing of enrichment operations, which DOE will propose to Congress in the near future.

B. Technical Accomplishments

The major FY 1980 gaseous diffusion technical accomplishments are associated with the Cascade Improvement and Cascade Uprating Programs (CIP/CUP). The CIP/CUP is on schedule for completion at Oak Ridge and Paducah by the end of FY 1981.

Because of the recent 227 day strike at the Portsmouth plant, that portion of the CIP/CUP will be completed in FY 1983. By the end of FY 1980, 9.2 million SWU of the 10.1 million SWU capacity target for CIP/CUP will have been installed. No technical problems are foreseen in achieving the remainder of the capacity target.

Other technical support accomplishments associated with the operational, environmental and safety requirements of the operating facilities include the power recovery program. A major element of this program is the demonstration project, scheduled to begin in FY 1980, which will demonstrate the economic and technical feasibility of recovering waste heat from the plants. If successful, the power recovery program could reduce the diffusion plants electric power requirements 2-6 percent (200-400 megawatts). The magnitude of the power recovery program will depend on the technical success of the FY 1980 demonstration project and the future cost of electric power.

The centrifuge development program is developing the base technology for transfer to the centrifuge and equipment manufacturers for use in the GCEP. From the centrifuge development program we have a centrifuge design which this year will be qualified for production. Extensive development and qualification tests are ongoing, and valuable operating experience and test data are being obtained. Much of the potential of the centrifuge process will be achieved after manufacture of the production centrifuges has already begun, and we have a continuing program for development and qualification of advanced centrifuges.

The GCEP project is progressing on schedule. Presently, 8 of the original 12 architect engineering firms have completed design on their portion of the project. Eight major construction contracts have been completed and 10 others are underway including contracts for site rough grading, and Processing Building No. 1 foundation and structural steel. Eighteen offsite test and demonstration projects are being designed and constructed. Major procurement contracts have been placed for centrifuge machines, process equipment, electrical switchgear, transformers and some critical raw materials. A total of about 2,400 people are now directly employed in design and construction of the plant.

The initial section of the first process building called the early train, is scheduled to be on-line in 1984. The early train will provide the first operation of commercial mass-produced centrifuges. Operation of the early train is essential to verify and qualify the manufacturing and assembly process before tens of thousands of centrifuges are required.

Production of separative work from the GCEP will begin in 1987, with a capacity of 2.2 million SWU's per year available by 1988. Additional production capacity will be added in 1.1 million SWU increments as demand for enrichment services indicates the need. For planning purposes, full production of 8.8 million SWU's per year is scheduled for 1993.

The GCEP facilities will consist of eight centrifuge process buildings with a total floor area of 2.3 million square feet. Other facilities include the Recycle/Assemby Building, and other administrative, support, test, and service facilities as required. The electrical power consumption of the GCEP will be only 135 megawatts, about 5 percent of what an equal capacity gaseous diffusion plant would require.

The GCEP facility design began in March 1978, all of the architect-engineers have been selected, and design is proceeding essentially on schedule.

The GCEP project is presently in the construction stage, with a construction manager/constructor on board. Site preparation activities are well along and foundations are being poured for the first process building. Several auxiliary buildings have been completed.

The AIS program achieved all of its technical goals during FY 1979, and progress on all three processes under development is continuing. Depending on the success of these development efforts, two of the processes will be selected for further evaluation in the future. Ultimately, one process will be selected for scale-up to commercial production size.

C. Production

In FY 1980 the three gaseous diffusion plants are planned to operate at an average power level of 3,011 megawatt-years. Production from the three plants at this power level will be 10.6 million SWU. However, the Tennessee Valley Authority (TVA) has the option to expand their seasonal power reductions during FY 1980. If TVA elected to take to the full option, production for FY 1980 would be 10.2 million SWU.

D. Enrichment Supply and Changes in SWU Charge

Enrichment Supply

During FY 1979, 80 percent of DOE's long-term, fixed-commitment customers converted to the new Adjustable, Fixed-commitment (AFC) contract. DOE also signed three new AFC contracts. As of January 1, 1980, DOE has a total contract commitment to supply 304 GWe of nuclear power of which approximately 200 GWe is with U.S. utilities and 104 GWe is with non-U.S. customers.

Enrichment Services Charges

Last year, the charge for uranium enrichment services increased by 11.6 percent from $88.65 per SWU to $98.95 per SWU. This increase was not nearly as substantial as the increase in the cost of electricity required to operate our plants (24 percent) or the increase in the cost of coal to our electric suppliers (17 percent). Based on historical experience and anticipated technical improvements, we expect that future increases in the charge for enrichment services will be less than increases in the price of coal or electricity.

E. Problems

Contract Terminations

Ten of our enrichment service customers (one domestic, nine non-U.S.) terminated their contracts with DOE in FY 1979. A number of additional contracts may be terminated this year. Reasons for terminations include reactor cancellations, licensing delays, desires for diversification of supply, needs to support national enrichment programs, and perceived uncertainty resulting from U.S. non-proliferation policies. We are encouraging customers who no longer need enrichment service contracts to assign their contract to another customer, if possible, rather than to terminate.

Portsmouth Strike

During 1979, members of the local Oil, Chemical and Atomic Workers union at the Portsmouth gaseous diffusion plant were on strike for an extended period. The strike commenced on May 3, 1979, and members of the union did not vote to return to work until December 16, 1979.

During the strike, the Portsmouth plant, which is highly automatic, was operated by company supervisory and management personnel that had previous training in cascade operation. As a result of this action, actual production loss impacted by the strike was extremely small, only about 500,000 SWU or less than four percent of total production. As we assess the results of the strike, the only significant impact will be a slip in the completion date of the Portsmouth plant CIP/CUP construction program from the end of 1981 to mid-1983. This schedule slip will not cause the project to exceed the total estimated cost of the project.

One issue raised by the union, outside of the normal collective bargaining negotiations, concerns health and safety issues at the plant. DOE formulated a special panel to investigate the union's allegations and, thus far, the panel has not identified any significant health and safety concerns at the Portsmouth plant. The DOE plans to complete this investigation by the end of this month and will issue a final report of the panel's findings.

F. Resource Data Collection and Evaluation

In FY 1979 substantial progress was made in the data gathering phases of the National Uranium Resource Evaluation (NURE) program and in the transition to the quantitative evaluation of resources based on that data. At the same time the program strategy was modified to assure that first priority is given to quadrangles with the largest potential to increase our resources. In addition, rather than using a uniform data gathering and evaluation approach, we are varying our activities as appropriate for the areas involved. Work on specific sites considered favorable for types of deposits found in other countries (World Class) and of intermediate grade was also initiated. These investigations supplement the systematic quadrangle evaluation by focusing on specific sites with possible near term impact on the U.S. resource position.

Data gathering efforts in FY 1979 included the flying of 190,000 flight line miles of airborne radiometric surveys for a total of 780,000 miles of the 1,100,000 planned. A cumulative total of 240 quadrangles out of the 621 covering the entire U.S. have been completed. Some 170,000 hydrogeochemical samples were taken and work was completed on a cumulative total of 102 quadrangles. Over 200,000 feet of drilling was done in FY 1979. Detailed evaluation of this data and other available information and quantitative resource assessments were completed in the first 18 quadrangles. Quadrangle evaluation and assessment will be an increasing part of the program with 98 quadrangles to be assessed in FY 1980. A total of over 900 reports have been issued on this program.

In addition to the work on the NURE program, ore reserve estimates were made for about 1,000 of the 1,800 deposits on which records are maintained, based largely on drill hole data provided by industry.

IV. FY 1981 Budget Request

The DOE's FY 1981 budget for the Uranium Enrichment Activities Program is shown in Charts 2 and 3. Chart 2 provides a breakdown of the relative size of major program components of the budget. Chart 3 provides a breakdown of the revenue sources which are used to finance the major portion of the budget and the funds requested in the FY 1981 Appropriation. As is shown in Chart 3, a significant portion of the fund requirements for the program are generated from revenues (approximately 94%), however, a net Appropriation of $87,541,000 or 6% of the program requirements is necessary in FY 1981.

The budget for the Uranium Enrichment Activities program can be best described by looking at four major program activity categories shown on Chart 4: 1) Gaseous Diffusion Operations and Support; 2) Gas Centrifuge Operations and Support; 3) Program Direction; and 4) Revenues. The Gaseous Diffusion Operations and Support Activity includes funds required for ongoing operation of the gaseous diffusion plants at Oak Ridge, Tennessee; Paducah, Kentucky; and Portsmouth, Ohio, as well as funds required to assure these plants are well maintained both technically and physically. Funds are included for the purchase of cascade power, cascade operations, process and technical support, and necessary supporting services.

Gaseous Diffusion Operations and Support

Consistent with our production planning and operational constraints, DOE will operate the gaseous diffusion plants at their minimum power level of 2,660 megawatts in FY 1981 and produce 9.5 million separative work units. At this power level, operational and safety margins are sufficient for cascade control. This action will result in the purchase of less power TVA and OVEC than required in the current contracts with these two power suppliers. At the budget power level, DOE would be required to pay demand charges for power not purchased totaling $43,000,000 (TVA - $23,000,000; OVEC - $20,000,000). This $43,000,000 has been included in the budget. DOE has undertaken negotiations with the three power suppliers in an effort to reduce or eliminate the demand charge payments.

The current contract requirements for cascade power in FY 1980 are currently estimated at $603,000,000 versus an appropriation of $548,336,000. Subsequent to the submission of the FY 1980 budget, 1) TVA raised power rates above those provided for in the budget and 2) DOE received indications that TVA will not take all of their seasonal power reductions and consequently power deliveries will likely be higher than projected in the budget. In addition, OVEC has experienced unanticipated maintenance and pollution control financing requirements which will increase power costs in FY 1980.

The FY 1981 request for cascade power ($647,000,000) provides for a 22 percent increase in the unit cost of power over the current estimate for FY 1980, and reflects current information on the cost of power to be supplied by our three power suppliers during FY 1981. Without payment of contract demand charges for power not taken the unit cost of power would be 12 percent over the FY 1980 estimate.

We request diffusion operating funds in order to cover the day-to-day operation and maintenance costs of the diffusion plants. Of the increase requested, approximately two-thirds will cover increased costs of wages, employee benefits, and materials, with the remainder required for increased maintenance, and the continuation of a 3-year program to reroof the diffusion plants.

The majority of the process and technical support effort during FY 1981 will be directed toward assuring the long term reliability and performance of the existing plants at the uprated capacity at minimum costs. The primary activity will be technical efforts directed toward sustaining long-term plant productivity by minimizing operating problems, adapting to changing conditions, and optimizing operations under such changing conditions. In addition, the existing plants will be required to comply with all current and future environmental, health, safety and other policy or regulation changes. The effective treatment of such problems will be a significant part of the technical support effort. Technical support for the CIP/CUP program will be directed toward assuring that the best possible equipment and technology will be installed during the remainder of the capacity expansion programs.

Supporting services funds will allow us to continue the various support activities essential for the efficient operation of the plants, such as: maintaining standby facilities; interplant flow of enriched uranium and other material; warehousing of uranium compounds; undertaking conceptual design and other engineering studies; and marketing our services to both foreign and domestic customers.

Gas Centrifuge Operations and Support

Gas centrifuge operations include funds for development and demonstration, including operation of existing facilities, support for construction projects designed to provide capability for testing and qualification of the GCEP centrifuge, and investigation of the potential for improved centrifuge performance. The primary thrust of the development program through FY 1981 is to provide qualified designs for the centrifuge and supporting components to be used in GCEP. With the startup of the Centrifuge Plant Demonstration Facility (CPDF) in 1982, the centrifuge development program is expected to peak. At that time greater emphasis will be placed on improving the centrifuge performance for incorporation in the later GCEP process building.

Three manufacturers have been selected to provide centrifuges under initial GCEP procurement contracts; therefore, the industrial activities will shift from development emphasis to engineering and manufacturing in support of GCEP, and DOE will terminate its development technology transfer program.

Finally, our FY 1981 request includes funds necessary for startup activities associated with GCEP, including conceptual design studies, special management studies, miscellaneous studies by centrifuge program contractors, and the initial training of operation and maintenance personnel required for the startup of the first two GCEP process buildings.

Program Direction

The FY 1981 request also includes funds to cover the salaries and related benefits of the DOE Headquarters and field personnel directly associated with the Uranium Enrichment Activities Program, including funds for 68 DOE staff-years--49 staff-years for necessary Headquarters program management and support, and 19 staff-years at the Oak Ridge Operations Office for guards required during shipment of enriched uranium.

Revenues

A major item in our FY 1981 budget is revenues and includes the income which will accrue from enrichment services for domestic and non-U.S. customers. The estimate shown is the net of advance payments made by enrichment services customers in prior years. The estimate for FY 1980 provides for the sale of 10.8 million SWU's and is based on cost recovery pricing for all services performed. Also included in the estimate is aproximately $110 million associated with the sale of depleted uranium to an Italian utility (ENEL).

Plant and Capital Equipment - Diffusion Operations

Turning to Chart 5, the first item, Environmental Protection and Safety Modification, Phase I, is the first in a series of annual projects designed to bring the gaseous diffusion plants into compliance with the various Federal, State and local pollution control requirements. This project will bring the diffusion plants into compliance with existing requirements concerned with the disposal of solid wastes and the discharge of certain liquid pollutants.

The second item, Instrumentation for Purge Cascades and Withdrawal Areas, provides vibration, temperature, and UF_6 detection data processing instrumentation similar to instrumentation provided to process equipment by the Cascade Uprating Program. Proper monitoring by computer and the use of trend analysis will provide operational information to prevent catastrophic failures of critical process and support equipment.

Supervisory Control and Data Acquisition systems, the next item, provides a system to monitor the critical parts of the high voltage switchyards and the power distribution networks. The existing systems incorporate technologies available at the time the plants were built, (25 to 30 years ago) and are proving to be inadequate to meet current and future power gradients and distribution needs.

The fourth item, Utilities Upgrading, will improve the mechanical reliability and operational efficiency of some of the plant utility systems that were not improved as a part of the Cascade Improvement Program (CIP) or Cascade Uprating Program (CUP). Many of the units and systems being upgraded are approaching forty years of service, are no longer reliable, and are costly to maintain.

The fifth item, UF$_6$ Cylinders and Storage Yards, provides for new 14-ton cylinders, cylinders handling equipment and cylinder storage yards. These facilities are necessary to store depleted UF$_6$ generated by operating the gaseous diffusion plants in a safe and environmentally acceptable way.

The sixth item, General Plant Projects, provides for the continuing requirements to maintain the enrichment facilities in a good state of repair, to adapt the facilities for improved production techniques, to achieve economics of operations, and to reduce or eliminate health, fire, security, and other problems. We cannot accurately identify specific work this far in advance, because operating conditions in FY 1981 will determine what work will be required.

Chart 5 also shows the capital equipment funds requested for FY 1981. The funds requested are for replacement equipment to support the ongoing operation of the diffusion plants and equipment necessary for major development efforts in the centrifuge area. DOE now has contracts to provide product from the gaseous diffusion plants extending through the year 2015. Meeting these commitments will require uninterrupted operation of the gaseous diffusion plants and enough money for equipment to assure such uninterrupted operation.

Prior year projects requiring FY 1981 appropriations are shown on Chart 6 and include five projects authorized in FY 1980: (1) Motor and Switchgear Upgrading rewinds some of the smaller sized process motors and replaces some of the process and auxiliary switchgear that were not included in the CUP program; (2) Power Recovery Demonstration Cells provide facilities to demonstrate the feasibility of recovering a portion of the power (waste heat) used in the gaseous diffusion plants; (3) Plant Facilities Security Improvements provide improved security at the diffusion plants including essential outlaying facilities serving the plants; (4) Control of Water Pollution provides facilities to reduce the discharge of pollutants and to control accidental releases of potentially hazardous or polluting materials into nearby streams; and (5) Control of Gaseous Effluents provides facilities at the Oak Ridge and Paducah plants to control the release of airborne effluents emanating from routine operations, primarily fluorides.

The final prior year item, Process Equipment Modifications, is part of the Cascade Improvement Program started in FY 1971. This project will increase the capacity of the existing gaseous diffusion plants by about 5.5 million SWU's per year or about one-third (from 17.2 to about 22.7 million SWU's per year). The increase in capacity will come from incorporating the latest improvements in gaseous diffusion technology while not consuming additional power and with no increase in operating costs. The program, scheduled to be completed in FY 1981, will now be completed during FY 1982 as the result of a 227 day strike at the Portsmouth plant that ended on December 15, 1979.

Plant and Capital Equipment - Gas Centrifuge Operations

Chart 7 shows the plant and capital equipment funds requested in the FY 1981 budget for Gas Centrifuge Operations and Support.

The Enriched Uranium Production Facilities Project is for construction of the Gas Centrifuge Enrichment Plant (GCEP) at the DOE Portsmouth Plant site near Piketon, Ohio. The GCEP will provide needed additional enrichment capacity and when completed, consist of eight process buildings, a recycle/assembly building and several plant support facilities.

The FY 1981 funds will permit continuing activities, started in prior years, including: design, expansion of vendor capacity, technical support, procurement of centrifuge machines and service modules, materials, and other GCEP components. Funds are provided for continuing the construction of Process Building No. 1, construction of the Recycle Assembly Building, and construction of centrifuge manufacturing facilities. The total estimated cost (TEC) for this project is $5.5 billion in FY 1981 dollars.

The budget request for the Uranium Resource Assessment Program is shown in Chart 8. The FY 1981 requested budget authority of $35.8 million represents a decrease of $28.7 million from the FY 1980 appropriations. The decrease reflects a somewhat lessened urgency regarding the completion of a comprehensive study of U.S. uranium resources. Reduced demand projections, and an improving resource situation can allow the deferral of decisions for large-scale commitment to advanced nuclear systems. The National Uranium Resource Evaluation Program continues to be an ambitious effort to systematically and comprehensively evaluate U.S. resources. While a reduced program activity and modified approach may require a longer completion time, the results will provide a continually improving basis for developing energy policies, programs, and priorities.

V. Technical Aspects of the Program

A. Uranium Enrichment Activities Program

Operational Planning for the DOE Enrichment Plants

DOE has prepared a long-range operating plan for its enrichment plants. A synopsis of the plan is presented below.

DOE Projection of Nuclear Power Growth

The DOE Office of Uranium Resources and Enrichment (OURE) has recently updated its estimates of nuclear power capacity to be served by the United States uranium enrichment plants. A summary of the current mid-range estimate is shown on Chart 9. OURE estimates that a total 161 gigawatts of U.S. and non-U.S. nuclear power capacity with DOE enrichment services contracts will be on-line by the end of 1985. On line nuclear power capacity with DOE enrichment services contracts is expected to increase to 227 gigawatts by 1990 and further increase to 294 gigawatts by 1995. These estimates are lower by 19 gigawatts in 1985 and 58 gigawatts in 1990 than presented in last year's testimony and reflect repercussions of the Three Mile Island 2 incident, announced delays and/or cessation of nuclear construction activities by some domestic utilities, and enrichment service contract terminations by some non-U.S. customers.

The estimate for domestic nuclear power capacity on line through 1990 reflects a detailed examination of each reactor currently in the "pipeline" - i.e., those formally announced, ordered, under construction permit review, under construction or in operation. The 1995 domestic estimate reflects an October 1979 mid-range projection made by the Energy Information Administration (EIA) in a re-evaluation of the nuclear forecasts published in its July 1979 annual report to Congress. The non-U.S. estimates were developed analogously to the domestic estimates. Each non-U.S. reactor with a DOE enrichment contract was examined in detail. In addition, a country-by-country evaluation was made of formal nuclear plans through 1995 and an assessment made of the likelihood of achieving these plans as well as the potential for the U.S. to obtain an enrichment contract.

The above estimates reflect our best guess at this time. Although there is a sound basis for these estimates, there is considerable uncertainty about the future, particularly with respect to the impact of future Nuclear Regulatory Commission licensing policies, the possible impact of international events (such as the loss of Iranian oil), impact of United States non-proliferation policies, etc. We will continue to monitor these events periodically and revise our projections accordingly.

Requirements for DOE Enrichment Services

The enrichment services requirements corresponding to the nuclear power growth are shown in Chart 10. A projection of enrichment services requirements based on the above nuclear power growth was determined using standardized boiling water and pressurized water once through cycle reactor models. These models reflect annual refueling schedules as well as 18 month refueling schedules (which have higher SWU requirements). The latter was included since a significant fraction of our customers have indicated that they plan to operate with longer refueling schedules.

In addition to nuclear power reactor requirements, the requirements shown on Chart 10 also include U.S. Government needs. Through 1995, Government requirements are expected to average about one million SWU per year. Government users presently include the Naval Reactors program, and the nuclear research and development programs.

Actions Based on the DOE Projection for Enrichment Services

The projected DOE enrichment services supply is also shown on Chart 10. Based on the DOE enrichment services projections, we have developed an operating plan for meeting requirements. The plan seeks to supply the projected requirements for enrichment services, at a transaction tails assay no greater than 0.25 percent U-235, while minimizing DOE-owned inventories of low enriched uranium.

It appears that we can operate the enrichment plants at the current 0.20% U-235 tails assay until about the early 1990's. We also do not expect to have to increase the transaction tails assay above the current 0.20% U-235 level through 1995 thereby allowing customers to obtain nuclear fuel at close to minimum cost.

The low enriched uranium inventory levels as a function of time for the current operating plan are shown in Chart 11, which displays the separative work contained in DOE inventory of low enriched uranium. As indicated we meet all projected requirements and maintain an inventory of at least 14 million SWU's throughout the period.

The minimum level is comprised of:

(1) A 9 million SWU working inventory to serve as a buffer between the levelized daily production of enriched uranium and the intermittent day-to-day shipments of finished product to enrichment services customers.

(2) A 5 million SWU set aside for possible use as part of U.S. efforts to improve international nuclear fuel assurances as described in the President's response to Section 104(b) of the Nuclear Non-proliferation Act of 1978.

In producing the inventory shown on Chart 11, we have assumed (except for FY 1981) that the full 8.8 million SWU GCEP capacity will be completed in 1993, and that actual electric power delivered to the gaseous diffusion plants will be only 96 percent of the planned levels. This factor is based on nine years of historical data and reflects reductions in contracted power deliveries in emergencies to help alleviate threatened power shortages to consumers, coal shortages at the DOE power suppliers, generator outages due to storms, etc. We have also assumed further power reductions in the FY 1982 - 1986 period in order to place the supply of enriched uranium in better balance with forecast demand. DOE is currently negotiating with its power suppliers and we will provide an update to the uranium enrichment operating plan when these negotiations are complete.

Sale of Depleted Uranium to Italy

DOE has signed a contract to sell 20,000 metric tons of 0.3 percent U-235 depleted uranium to the Italian electric utility, Ente Nazionale per l'Energia Ellecttrica (ENEL). The sale price is $8.11 per kilogram for a total sale of $162 million. The material will be delivered in fiscal years 1981 and 1982 to EURODIF, the gaseous diffusion plant in Tricastin, France. Italy's nuclear power program has been delayed considerably, and ENEL will have the uranium enriched under their EURODIF contract to make it available for subsequent use.

The sale of depleted uranium will not significantly affect DOE's uranium enrichment program. Current operating plans indicate that the 0.3 percent U-325 depleted uranium would not be used as feed for the U.S. enrichment program until the mid 1990's, when other alternatives will be available. Furthermore, the quantity of material in this sale represents only a small fraction of DOE's expected depleted uranium inventories through this period.

Marketing Activities

A goal of U.S. energy policy which the President enunciated in the National Energy Plan, is for the U.S. to "restore confidence in its ability and willingness to supply enriched uranium services." DOE is committed to the United States maintaining its position as a major supplier to the non-U.S. market and as the sole supplier for the U.S. enrichment market. This will require that we operate existing enrichment facilities efficiently, undertake a timely expansion of DOE enrichment facilities, and at the same time, engage in an active contracting and marketing effort. This is necessary if we are to compete with the European suppliers, e.g., URENCO, EURODIF/COREDIF, for international customers. To accomplish this we are:

- maintaining an enrichment contracting posture which reflects customer needs, U.S. policy and current market conditions;
- promoting our service by informing existing and potential customers of DOE enrichment policies, contractual terms, etc.;
- using regional foreign and domestic missions and conferences to explain DOE's contract arrangements, present capacity and expansion plans, as well as to assess potential market opportunities, prevent the loss of existing customers and establish meaningful contacts; and
- analyzing market forces, customer needs and supply/demand conditions.

With a concerted effort in contracting and marketing, the U.S. will continue to realize benefits from the uranium enrichment program in terms of balance of payments, domestic employment and having significant influence on nuclear policies abroad.

During the past year our marketing staff has had numerous contacts with enrichment customers, both at home and abroad. A DOE team went on a marketing mission to Mexico in May 1979, another mission to Turkey, Egypt and Greece in September-October 1979, and an extended three-week mission to each of the utilities in Japan, Korea, and Taiwan in January-February 1980. Maintaining a strong tie with our U.S. customers is also a high priority goal. In February 1980 we are holding enrichment seminars with U.S. utility people in five cities from Boston to San Francisco to provide a means for personal contacts and exchange of business information between ourselves and our U.S. customers.

In July 1974, because the expected capacity of the three gaseous diffusion plants was committed, the U.S. stopped contracting for enrichment services. On May 26, 1978, Secretary Schlesinger announced that DOE was ready to accept new orders for enrichment services with domestic and non-U.S. customers. This announcement followed congressional hearings and congressional approval of a revision to the Uranium Enrichment Services Criteria recognizing that DOE enrichment capacity would be expanded by the construction of the 8.8 million SWU's per year Gas Centrifuge Enrichment Plant at Portsmouth, Ohio. By re-entering the enrichment services market, the U.S. has enhanced the credibility of its fuel assurances to those nations abiding by appropriate non-proliferation obligations.

The new Adjustable, Fixed-Commitment (AFC) contract for uranium enrichment services which was made available in July 1978 has been well received. About 80% of the customers who previously held the Long-Term, Fixed Commitment contract have converted to the AFC contract. We now have 174 AFC contacts, including 3 new contracts. These AFC contracts cover the fuel requirements for about 170 million kilowatts of nuclear generating plant capacity. The total of all types of DOE contracts covers about 305 million kilowatts of nuclear power. Also during FY 1979 we had 10 customers terminate their enrichment contracts. There were various reasons for these terminations, including cancellation of the reactor project, desire to support a European enrichment supplier for nationalistic reasons or for diversification of supply, and a feeling of uncertainty and lack of assurance about being granted a license to export enriched uranium under the terms of the Nuclear Non-Proliferation Act of 1978.

The Adjustable, Fixed-Commitment contract has already accomplished one of the objectives it was designed for; namely, allowing customers to reschedule firm deliveries to a later date, in line with actual needs. Before the AFC contracts were signed last year, there were 72.3 million separative work units (SWU's) scheduled for delivery to fixed-commitment customers over the five year period FY 1980 through FY 1984. After the AFC conversions and schedule adjustments were completed, only 40.7 million SWU's remained and 31.6 million SWU's were delayed beyond FY 1984. It has also been noted that a number of utilities are pooling SWU's as a way to match purchases with real demand. The AFC contract permits the customer to make use of surplus SWU's delivered under another DOE contract instead of ordering "new" SWU's under his own AFC contract. In short, the AFC contract seems to be working.

B. Uranium Resource Assessment Program

National Uranium Resource Evaluation

The National Uranium Resource Evaluation (NURE) is a phased program of data gathering and evaluation, which was initiated in 1974, and is planned to be completed in the late 1980's. The strategy of NURE is to systematically develop basic information which can indicate favorable geologic areas for the occurrence of uranium deposits. These data provide the basis for estimation of contained resources, by analogy to environments where known deposits have been studied in detail. Although the program to date has been heavily oriented toward the data gathering phase, a significant part of the U.S. will also have been evaluated and resource estimates made by the end of FY 1980.

NURE is a complex and widespread program involving numerous organizations and individuals with a variety of expertise. Our principal contractor is the Bendix Field Engineering Corporation. The United States Geological Survey is involved in this assessment program and participates in a number of other activities. In addition, state geological surveys, universities and private firms are also involved in the program.

The NURE program is planned, carried out and reported on the basis of the National Topographic Map System Quadrangles. In this system the nation has been divided into some 621 quadrangles which, in the conterminous U.S. are 1° of latitude by 2° of longitude and average about 5,700 square miles in area.

The data gathering phase has concentrated on a systematic nationwide airborne radiometric reconnaissance survey and a similar hydrogeochemical and stream sediment reconnaissance survey. Surface and subsurface geologic investigations are also done. The data from the various surveys and investigations are studied, supplemented by additional field studies as warranted, and evaluated to identify areas favorable for uranium deposits. A detailed comparison is made of the geologic features of these areas to areas with known types of uranium deposits. The survey results and the study are published as a folio for each quadrangle. The folio is the basis for quantitative assessments of the resources of each favorable geologic areas.

The data gathering phase is well underway. A substantial data base has been generated and is now being evaluated. Future efforts will increasingly be in the evaluation phase, hence more quantitative assessment results will be available. It is important that a high level of activity be maintained so that these data will be utilized. Accomplishments through FY 79 included:

- Completing over 780,000 of the planned 1,100,000 flight line miles to be covered by the national aerial radiometric reconnaissance survey,
- Collecting stream and sediment samples covering over 1,900,000 square miles,
- Completing over 212,000 feet of drilling and approximately 300,000 feet of logging of industry non-U drilled holes,
- Developing and transferring to industry a direct uranium borehole logging system,
- Placing an estimated 950 reports on open file, including 90 radiometric survey, and 207 hydrogeochemical surveys.

Program segment accomplishments through 1979 and plans for 1980 and 1981 are shown in Chart 12. The program plan for 1981 will complete the flying phase of the airborne radiometric reconnaissance survey, the results of which will be open filed in FY 1982. The status of the radiometric survey is shown in Charts 13 and 14.

The concept of a National Hydrogeochemical Survey will be dropped and future sampling will be done on field sites for which geochemical data are determined to be specifically needed. However, the national geochemical survey work completed through 1981 will have covered approximately one-half of the U.S. and will provide data for most of the higher priority areas. Charts 15 and 16 illustrate the status of the hydrogeochemical survey. It will be noted that a large part of the country has been sampled and efforts now are largely on analysis of the samples, reporting of results and integration into quadrangle evaluation.

The quadrangle completion work for the various areas are shown in Charts 17 and 18. By the end of FY 1980, 116 top priority quadrangles will have been evaluated. In FY 1981 30 additional quadrangle assessments will be completed. By the end of fiscal year 1983, a total of approximately 200 priority quadrangles will have been evaluated. The comprehensive assessment of the United States, covering the balance of the quadrangles will be completed in the late 1980's.

While quantitative results from the systematic quadrangle assessments are limited, results to date do suggest that the program will result in increases to our estimates of uranium resources. The more complete and comprehensive approach to development of basic field data and the detailed comparison of geology to known uranium deposits, of all types, tends to expand known favorable areas and also to identify entirely new favorable areas. At the same time the quality of the assessment is improved.

World Class Deposits

In addition to the systematic quadrangle evaluation program, studies are being conducted in specific areas considered favorable for the occurrence of deposits similar to those found in other countries (World Class deposits). In the U.S. most of currently identified resources are in sandstone type deposits. These are located primarily in the Colorado Plateau area of Colorado, Utah, New Mexico, and Arizona; the sedimentary basins in Wyoming, and the Texas coastal plain. However, deposits in other countries have primarily been in non-sandstone geologic environments. Past exploration in the U.S. has not investigated similar geologic environments in any detail. In World Class deposit studies many areas and types of deposits will be investigated and promising sites will be studied in detail. Detailed studies, including drilling, on 2 specific sites will be completed by the end of FY 1980. Detailed study on 4 additional sites will be initiated in FY 1981.

Intermediate Grade Deposits

Investigations are also being conducted in areas of known intermediate grade deposits, generally 0.01 to 0.05 percent U_3O_8, which have bee below the grades of primary economic interest to the mining industry but which are relevant to nuclear power planning decisions. Most of such resources are expected to be producible at costs less than $100 per pound of U_3O_8.

Intermediate grade studies have identified over 50 candidate areas for studies. Detailed study will be completed at 3 sites in FY 1980 and investigations will be initiated at 3 other sites in FY 1981.

SUBSURFACE INVESTIGATIONS

Subsurface investigations have involved drilling and logging to confirm estimates of resources, and to develop information on geologic conditions at depth as a basis for defining the nature and extent of favorable areas. Drilling is also used to investigate World Class and intermediate grade sites.

Subsurface investigations will be modified in FY 1981 and will sharply reduce the amount of drilling. Logging of industry drilling, including non-uranium exploration holes, will be continued but at lower levels.

International Activities

To expand the quantities and geographic distribution of the identified world uranium resources, DOE participates in the International Uranium Resource Evaluation Project (IUREP) and cooperative uranium exploration research and development projects sponsored by the Nuclear Energy Agency and the International Atomic Energy Agency. IUREP has identified some 40 priority countries where the possibility for discovery of uranium resources is good but where exploration and appraisal efforts have been inadequate. Field investigations are underway and will continue in those priority countries into FY 1981. A number of cooperative research and development studies are being conducted to improve the technology for identification and evaluation of uranium areas.

U.S. Uranium Position

DOE's current estimates of U.S. uranium resources are shown in Chart 15. These estimates reflect input from the NURE program; but, as previously noted, only limited areas have been reassessed by the NURE program to date. The estimates are therefore an indication of our current knowledge and will change as work continues.

Ore reserves are contained in deposits delineated in detail, primarily by industry drilling. Those reserves producible at costs up to $50 per pound of U_3O_8, are estimated at 920,000 short tons U_3O_8. At $30 costs, which is closer to the level of economic interest at today's prices (in the low $40's), reserves are 690,000 short tons U_3O_8. The DOE cost categories account for all costs required to find and produce the uranium at the time the estimate is made and, as such, they do not represent the prices at which the uranium might be available in the market place.

Resources that do not meet the stringent requirements of detailed deposit drilling needed to establish reserves are defined as potential resources. DOE classifies potential resources into three categories: probable, possible, and speculative. The probable potential resources are those contained in extensions to known deposits and within delineated mineral trends, principally within the well-established uranium districts. Possible potential resources are contained in "productive" formations within "productive" uranium provinces, but outside the established mineral trends. "Productive" is arbitrarily defined as having resources or past production totalling 10 tons U_3O_8. Speculative potential resources are estimated for identified favorable areas within geologic formations or provinces that have not previously been "productive". Resource estimates presented here are unchanged from levels reported in 1979. Revised national estimates of uranium resources at $30 and $50 per pound of U_3O_8 and initial estimates of resources at $50 to $100 per pound of U_3O_8 will be available in October 1980, when a major report on the findings of the National uranium resource assessment will be issued.

In late 1979, the National Research Council's Committee on Nuclear and Alternative Energy Systems (CONAES) issued a report which addressed the role of nuclear energy in the United States. As part of their assessment, CONAES concluded that DOE's estimates of reserves and probable potential resources at forward costs up to $50 per pound of U_3O_8 of of "about 2.4 million tons" are reliable enough to plan on. CONAES also noted that if the additional resources estimated by DOE as possible and speculative were included the estimate would rise to about 4 million tons. Thus, there is no basic disagreement between CONAES and DOE on uranium resources since CONAES, in effect, has accepted DOE estimates. In their report CONAES concluded that "a more complete assessment is needed of domestic and world uranium resources, and of the rate at which they can be produced at various costs." We agree with that conclusion.

Estimates of the magnitude, location, and economics of the resource base are very important to understanding future availability. However, it is also necessary to evaluate the discoverability and producibility of these resources. A key factor is the quantity of uranium that can actually be produced annually in years ahead. This quantity depends on the level of exporation and ore discovery rate as well as the production expansion capability of industry. Detailed DOE studies of ore reserves and probable potential indicate that the capability exists for industry to expand production from the current annual rate of around 18,500 tons U_3O_8 per year to a level in the early 1990's of around 60,000 tons from $30 resources. This level could be further expanded by 15,000 tons if $30 to $50 resources were produced. An analysis of production capability from $30 to $50 resources done in late 1979 show this level could be further expanded by 15,000 tons.

These attainable levels would provide the basis for expanded U. S. light water reactor capacity. The 60,000 tons of U_3O_8 could fuel some 300,000 megawatts of light water reactor capacity assuming 0.20 percent U-235 enrichment tails and no recycle of uranium or plutonium. Such production levels are attainable, but should be considered as upper limits which would require a diligent effort by industry in exploration, development of new mines, and construction of ore processing plants. In connection with Section 161v of the Atomic Energy Act as amended, it is DOE's responsibility to ensure the viability of the domestic uranium industry. With the announcement of the relaxation of the restriction in enrichment of foreign origin uranium for domestic use, the need for a continuing review of industry viability was reiterated. Thus, the health of the domestic industry and the outlook for the future must be of continuing concern.

Industry Activities

The domestic uranium industry has been very vigorous in its response to growing uranium demands and increasing prices. Exploration, development, and production activities have been at record levels in recent years. However, concern about the reduced projections of future uranium demand, softening uranium prices, lack of new procurement contracting and expanding low cost foreign resources, coupled with the increased regulatory difficulties for exploration and uranium milling have caused a cutback in industry activity.

In 1978 over $300 million was spent for exploration, and some 48 million feet of hole were drilled. In 1979 about 38 million feet were drilled or about 20 percent less that in 1978. This is 28 percent below the 53 million feet that was planned by the industry at the beginning of 1979. A similar pattern appears in mining and milling plant construction. The $427 million of capital funds expended in 1978 for new mines and mills were well below the $634 million that was planned for 1978 and below the $492 million spent in 1977. Planned expenditures for 1979 and 1980 were also reduced from a year earlier. While we expect that the current level of industry activity will provide adequate uranium for the next several years, these observed reductions in exploration and production plant development may indicate a trend that could lead to future domestic supply difficulties and should be monitored closely.

Actual uranium production in the U. S. in 1979 was some 18,500 tons of U_3O_8 which was above actual 1979 requirements of around 16,000 tons U_3O_8. As shown in Chart 20, the uranium needed to fuel planned reactors is projected to grow to levels of around 25,000 tons in 1985, based on 114 GWe and 35,000 tons in 1990, based on 152 GWe of nuclear generating capacity. Total domestic supply consists of purchase commitments and additional material available for sale by domestic producers. This projected supply would be adequate to meet needs until the mid-1980's, but additional facilities must be constructed to cover the needs of later years.

Chart 20 also shows that projected uranium requirements for the mid-1980's and later are only partially covered by existing procurement contracts. Thus, utilities will have to buy substantial amounts of uranium to meet their future needs. The way in which utilities procure this additional uranium will influence U.S. producers' willingness to undertake additional development projects.

To date, foreign uranium has played only a minor role in meeting U.S. needs, as U.S. utilities have preferred to buy U.S. uranium. Given the size of the U.S. resource base and the fact that the producing industry is well developed, the U.S. should be able to meet its uranium needs in the future. However, U.S. producers might have to compete with generally lower-cost foreign producers for the U.S. market.

Uranium prices for new uranium contracts have been in the low $40 range for the last 3 years. Considering inflation, this has resulted in reduction of the real price. In addition, in recent months there has been reduction in nominal prices as well. This softening in prices reflects a more comfortable near-term supply-demand position, and increased optimism about adequacy of future supply. The reduction in uranium prices is causing some reassessment of exploration and production plans by producers, particularly those with higher cost resources. The important question is whether prices will stabilize at levels that adequately reimburse production costs and provide sufficient incentive for continued vigorous exploration, or whether prices will drop too far, for too long - leading to future supply problems. We will continue to monitor this situation closely since assessing the quantity of uranium resources in the U.S. does little good unless we have a viable domestic industry to produce this uranium.

VI. Present Health of Program

As concluding comments let me make my assessments of the health of the programs.

Overall program activities are proceeding smoothly and on schedule. While our production planning is aimed at achieving a balance between supply and demand, adequate flexibility is provided to assure our capability to respond to increased military and civilian needs. Within the short-term, production of low enriched uranium will slightly exceed demand. In my view this is not cause for concern, and may enhance our reliability as a world supplier.

Recognizing that the demand for enrichment services is highly uncertain, we are increasing our efforts to monitor and evaluate the market environment, and to pursue the most cost-effective production mode possible. Our gas centrifuge development effort continues to be highly successful and has been carefully reviewed and endorsed by independent industry experts. I am confident that this technology will be fully demonstrated and ready for incorporation into the Gas Centrifuge Enrichment Plant at Portsmouth.

The gaseous diffusion complex continues to perform with greater than 99 percent on-stream reliability and despite a prolonged strike at Portsmouth, production during the last year was within 96 percent of our target. Whereas the diffusion complex will continue to be the major portion of our enrichment capability, rising costs of electricity for the plants may necessitate replacement of some of this capacity with more energy efficient processes such as gas centrifuge or, in the longer term, advanced isotope separation methods. We are monitoring this situation closely, and will recommend appropriate action to the Congress when and if replacement is warranted.

I believe our contracting posture is currently quite good, and the terms and conditions under which enrichment services are offered by the U.S. are the most favorable in the world. This does not mean, however, that we can relax our efforts to aggressively market our services, or be responsive to customers' needs and concerns. There is still considerable work to be done to restore and maintain our position as a reliable supplier of enrichment services. I believe we have come a long way towards this goal to date, and we are in a strong position to face the challenges ahead.

This concludes my statement, Mr. Chairman and Members of the Committee. I would be happy at this time to answer any questions.

CHART 1

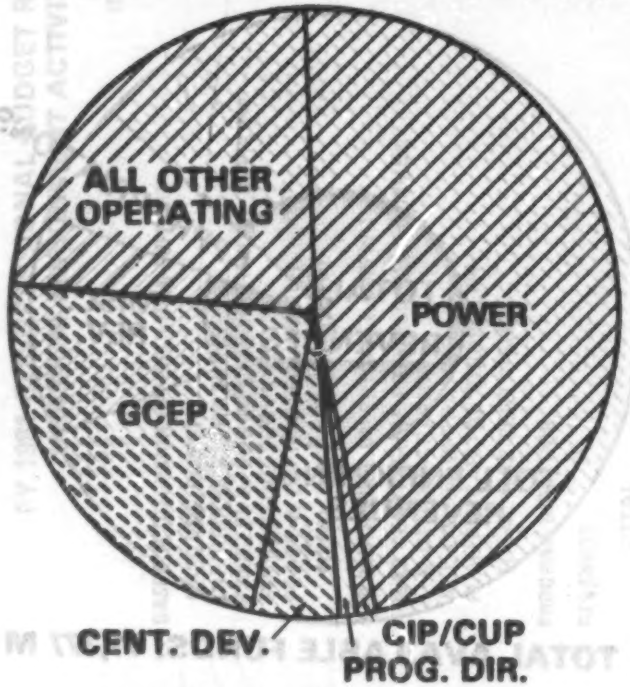
BUYERS OF DOE ENRICHMENT SERVICES

COUNTRY	NO. OF REACTORS	GWE	%	COUNTRY	NO. OF REACTORS	GWE	%
AUSTRIA	1	0.7	<1	S. AFRICA	2	1.8	<1
BELGIUM	3	1.7	↓	S. KOREA	8	6.8	2
BRAZIL	1	0.6	↓	SPAIN	9	6.9	2
EGYPT	1	0.6	↓	SWEDEN	11	8.4	3
FRANCE	3	2.2	↓	SWITZERLAND	6	4.0	1
INDIA	2	0.4	↓	TAIWAN	6	4.9	2
ITALY	3	1.4	↓	THAILAND	1	0.6	<1
JAPAN	58	49.0	16	UNITED STATES	208	199.8	66
MEXICO	2	1.3	<1	W. GERMANY	15	10.9	4
NETHERLANDS	2	1.1	↓	YUGOSLAVIA	1	0.6	<1
PHILIPPINES	1	0.6	↓	TOTALS	342	304.3	

CHART 2

URANIUM ENRICHMENT PROGRAM

FY 81 BUDGET BREAKDOWN



TOTAL BUDGET: $1,377 M

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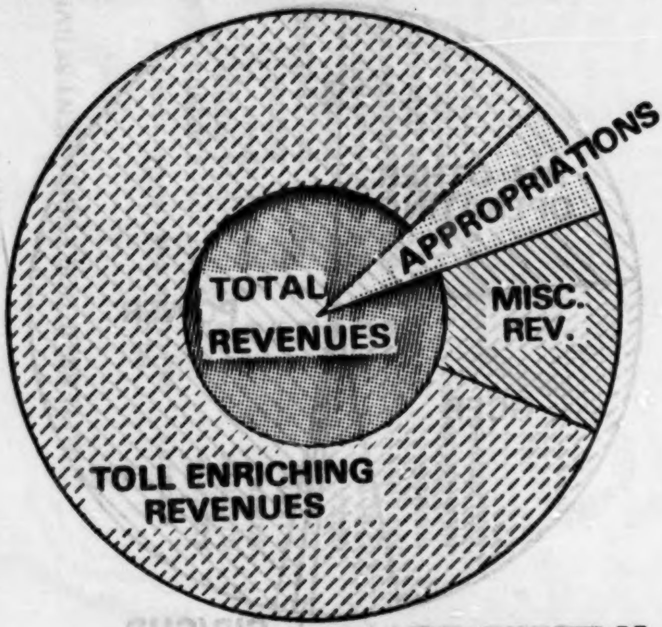
CHART 3

URANIUM ENRICHMENT PROGRAM

FY 81 REVENUE BREAKDOWN



TOTAL AVAILABLE FUNDS: $1,377 M

CHART 4

FY 1981 CONGRESSIONAL BUDGET REQUEST
URANIUM ENRICHMENT ACTIVITIES

	BUDGET AUTHORITY (DOLLARS IN MILLIONS) FY 1980	FY 1981
GASEOUS DIFFUSION OPERATIONS & SUPPORT		
CASCADE POWER	$548.3*	$647.0
DIFFUSION OPERATIONS	129.1	156.3
PROCESS & LONG-TERM TECHNICAL SUPPORT	14.5	14.5
SUPPORTING SERVICES	20.5	22.6
PLANT & CAPITAL EQUIPMENT	132.9	146.0
TOTAL GASEOUS DIFFUSION	$845.3	$986.4
GAS CENTRIFUGE OPERATIONS & SUPPORT		
GAS CENTRIFUGE PROCESS DEVELOPMENT & DEMONSTRATION	64.6	64.0
ALL OTHER OPERATING	1.0	.8
PLANT & CAPITAL EQUIPMENT	339.7	322.3
TOTAL GAS CENTRIFUGE	$405.3	$387.1
PROGRAM DIRECTION	2.4	3.0
REVENUES	-1,310.0**	-1,289.0
TOTAL	$-57.0	$ 87.5

*Excludes pending supplemental request of $54,600,000 for increased power costs.

**Excludes pending supplemental request decreasing revenue estimates by $253,000,000.

CHART 5

FY 1981 CONGRESSIONAL BUDGET REQUEST
URANIUM ENRICHMENT ACTIVITIES

GASEOUS DIFFUSION - PLANT & CAPITAL EQUIPMENT	(DOLLARS IN THOUSANDS)		
	PROJECT NUMBER	TOTAL ESTIMATED COST	FY 1981 OBLIGATIONS
PLANT			
ENVIRONMENTAL PROTECTION & SAFETY MODIFICATIONS, PHASE I GASEOUS DIFFUSION PLANTS	81-R-506	$ 55,000	$ 10,000
INSTRUMENTATION FOR PURGE CASCADES & WITHDRAWAL AREAS, GASEOUS DIFFUSION PLANTS	81-R-505	6,000	6,000
SUPERVISORY CONTROL & DATA ACQUISITION SYSTEMS, PADUCAH, KY. & PORTSMOUTH, OH. GASEOUS DIF. PLANTS	81-R-504	13,000	6,000
UTILITIES UPGRADING, GASEOUS DIFFUSION PLANTS	81-R-503	27,000	10,000
UF_6 CYLINDERS & STORAGE YARDS, GASEOUS DIF. PLANTS	81-R-502	8,000	8,000
GENERAL PLANT PROJECTS, VARIOUS LOCATIONS	81-R-501	17,500	17,500
PRIOR YEAR PROJECTS REQUIRING FY 1981 APPROPRIATIONS			64,500
SUBTOTAL PLANT			$122,000
CAPITAL EQUIPMENT			24,000
TOTAL GASEOUS DIFFUSION -PLANT & CAPITAL EQUIPMENT			$146,000

CHART 6

PRIOR YEAR PROJECTS REQUIRING FY 1981 APPROPRIATIONS

GASEOUS DIFFUSION - PLANT & CAPITAL EQUIPMENT	(DOLLARS IN THOUSANDS)		
	PROJECT NUMBER	TOTAL ESTIMATED COST	FY 1981
MOTOR & SWITCHGEAR UPGRADING, GASEOUS DIF. PLANTS	80-UE-5	$ 28,500	$12,000
POWER RECOVERY DEMONSTRATION CELLS, GASEOUS DIF. PLT.	80-UE-4	11,000	7,000
PLANT FACILITIES SECURITY IMPROVEMENTS, GASEOUS DIFFUSION PLANTS	80-UE-3	17,000	12,500
CONTROL OF WATER POLLUTION, GASEOUS DIF. PLANTS	80-UE-2	17,000	9,500
CONTROL OF GASEOUS EFFLUENTS, OAK RIDGE, TN. & PADUCAH, KY. GASEOUS DIFFUSION PLANTS	80-UE-1	7,000	3,500
PROCESS EQUIPMENT MODIFICATIONS, GASEOUS DIF. PLANTS	71-1-F	990,000	20,000
			$64,500

CHART 7

FY 1981 CONGRESSIONAL BUDGET REQUEST
URANIUM ENRICHMENT ACTIVITIES

(DOLLARS IN THOUSANDS)

GAS CENTRIFUGE - PLANT & CAPITAL EQUIPMENT	PROJECT NUMBER	TOTAL ESTIMATED COST	FY 1981 OBLIGATIONS
PLANT			
ENRICHED URANIUM PRODUCTION FACILITIES, PORTSMOUTH, OH. (GAS CENTRIFUGE ENRICHMENT PLANT)	76-8-g	$1,121,630*	$319,000
CAPITAL EQUIPMENT			3,300
TOTAL GAS CENTRIFUGE - PLANT & CAPITAL EQUIPMENT			$322,300

*Authorization requested to date. Total line item project cost is currently estimated at $5,500,000,000 in FY 1981 dollars, assuming project completion in FY 1993.

CHART 8

FY 1981 CONGRESSIONAL BUDGET REQUEST
URANIUM RESOURCE ASSESSMENT

	BUDGET AUTHORITY (DOLLARS IN MILLIONS)		
	FY 1980	FY 1981 REQUEST	CHANGE
OPERATING EXPENSES			
GEOLOGIC & RELATED INVESTIGATIONS	$ 47.7	$21.6	$-26.1
SURFACE GEOLOGIC & RELATED INVESTIGATIONS	19.9	12.2	-7.7
AERIAL SURVEYS	8.6	4.7	-3.9
HYDROGEOCHEMICAL SURVEYS	9.8	3.7	-6.1
SUBSURFACE GEOLOGIC INVESTIGATIONS	9.4	1.0	-8.4
TECHNOLOGY APPLICATIONS	3.9	3.8	- .1
SUPPORTING SERVICES	4.3	4.0	- .3
INTERNATIONAL ACTIVITIES	.5	.5	0
PROGRAM DIRECTION	4.3	4.6	+ .3
TOTAL OPERATING EXPENSES	$ 60.7	$34.5	$-26.2
CAPITAL EQUIPMENT	2.5	.5	-2.0
PLANT	1.5	.8	- .7
TOTAL URANIUM RESOURCE ASSESSMENT	$ 64.7	$35.8	$-28.9

CHART 9

CIVILIAN NUCLEAR POWER DEMAND

(1/80 DOE FORECAST)

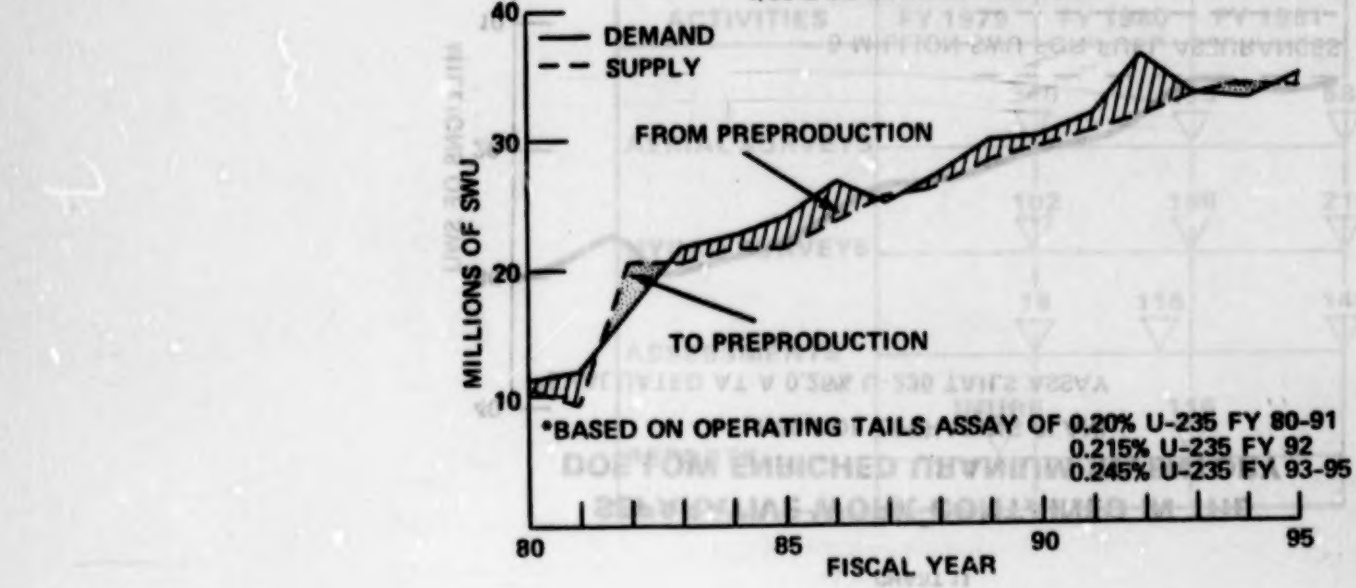
END OF YEAR	GIGAWATTS ELECTRIC U.S.	NON-U.S.*	TOTAL
80	56	35	91
85	107	54	161
90	147	80	227
95	179	115	294

*SUPPORTED BY DOE ENRICHMENT CAPACITY

CHART 10

ANNUAL SEPARATIVE WORK SUPPLY AND DEMAND*

1/80 DOE OPERATING PLAN



*BASED ON OPERATING TAILS ASSAY OF 0.20% U-235 FY 80-91
0.215% U-235 FY 92
0.245% U-235 FY 93-95

CHART 11

SEPARATIVE WORK* CONTAINED IN THE DOE LOW ENRICHED URANIUM INVENTORY

(1/80 DOE OPERATING PLAN)

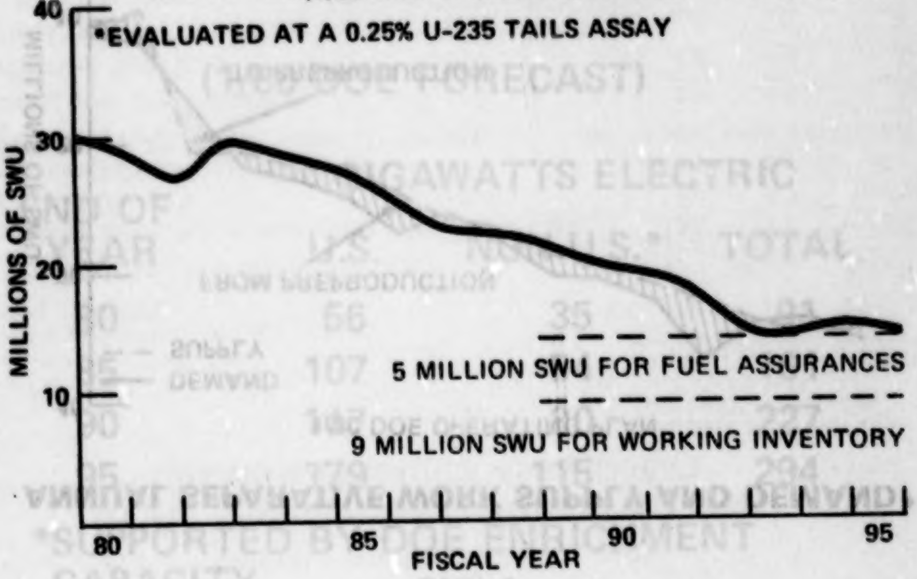


CHART 12

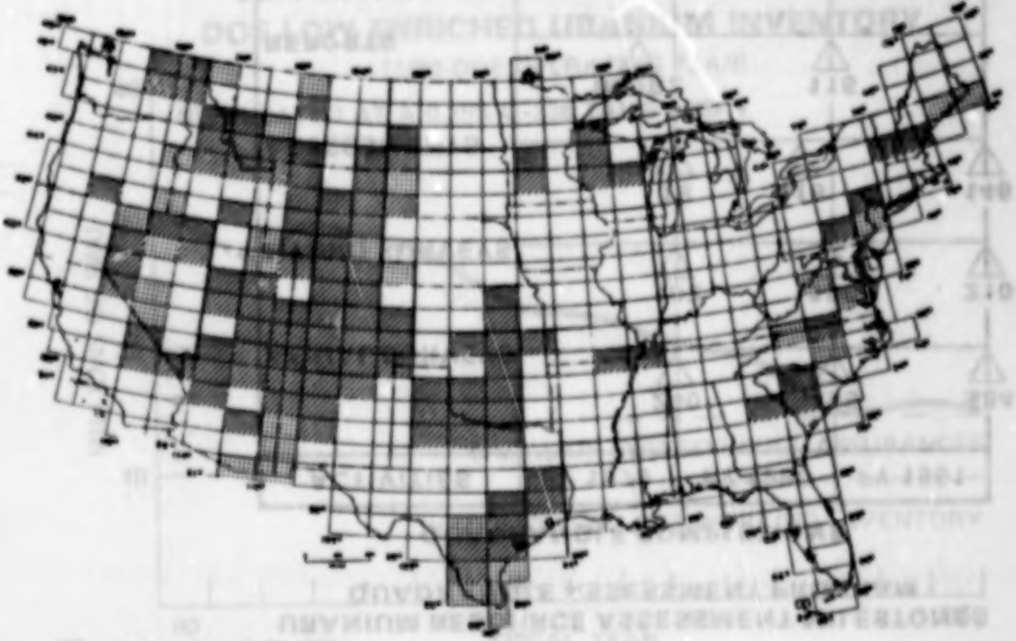
URANIUM RESOURCE ASSESSMENT MILESTONES QUADRANGLE ASSESSMENT PROGRAM

QUADRANGLE COMPLETIONS

ACTIVITIES	FY 1979	FY 1980	FY 1981
AERIAL SURVEYS	240 ▽	455 ▽	584 ▽
HYDRO SURVEYS	102 ▽	180 ▽	210 ▽
ASSESSMENTS	18 ▽	116 ▽	146 ▽
REPORTS	INURE ▽	116 ▽	

CHART 13

QUADRANGLE ASSESSMENTS



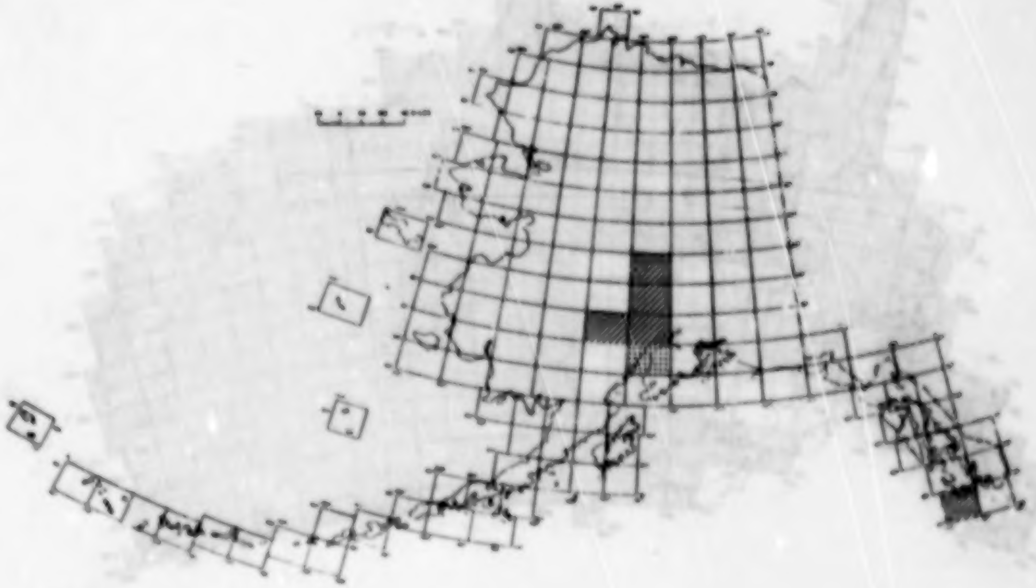
▩ Completed Through FY 1980

▦ Planned for FY 1981

12/31/79

CHART 14

QUADRANGLE ASSESSMENTS



▨ Completed Through FY 1980

▨ Planned for FY 1981

12/31/79

CHART 15

AERIAL RADIOMETRIC RECONNAISSANCE SURVEYS

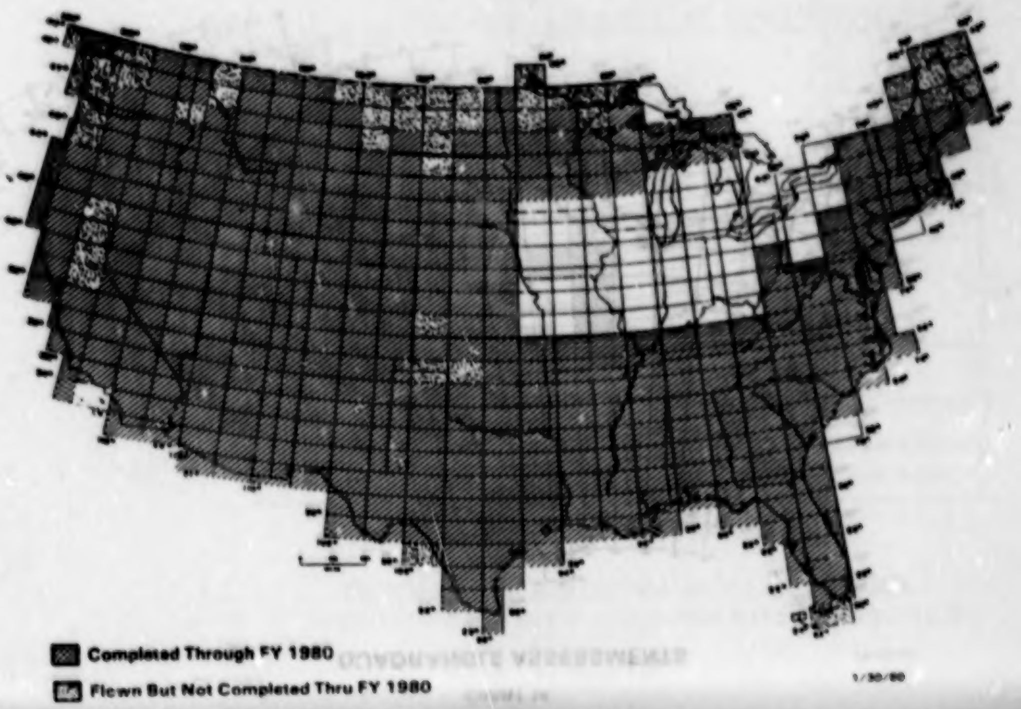

▨ Completed Through FY 1980
▨ Flown But Not Completed Thru FY 1980
1/30/80

CHART 16

AERIAL RADIOMETRIC RECONNAISSANCE SURVEYS

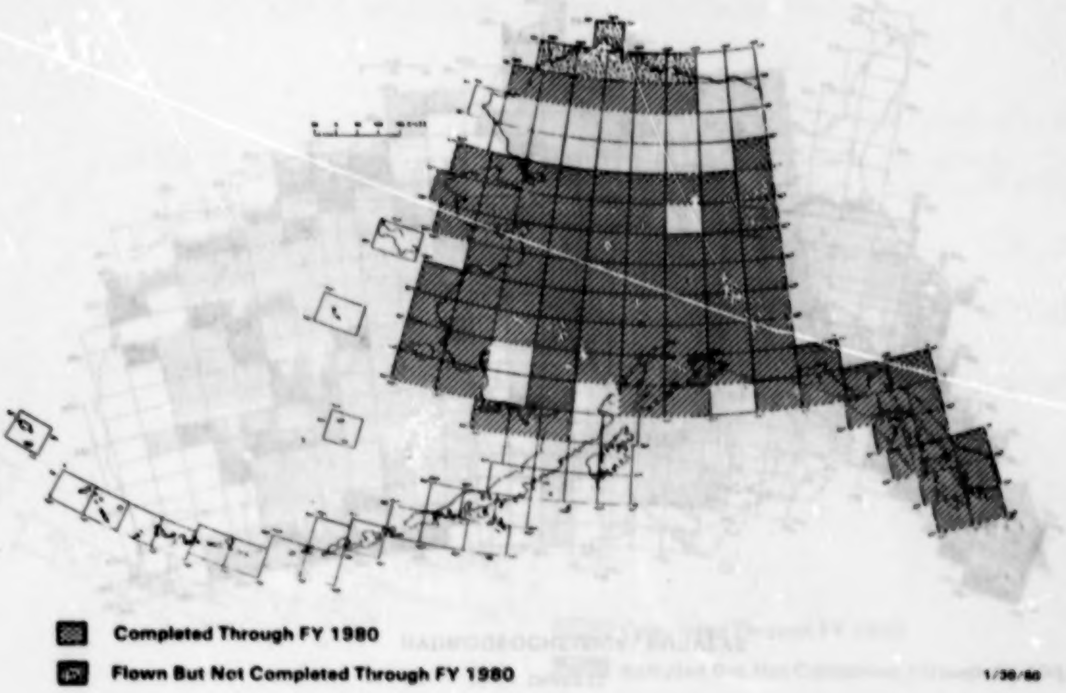
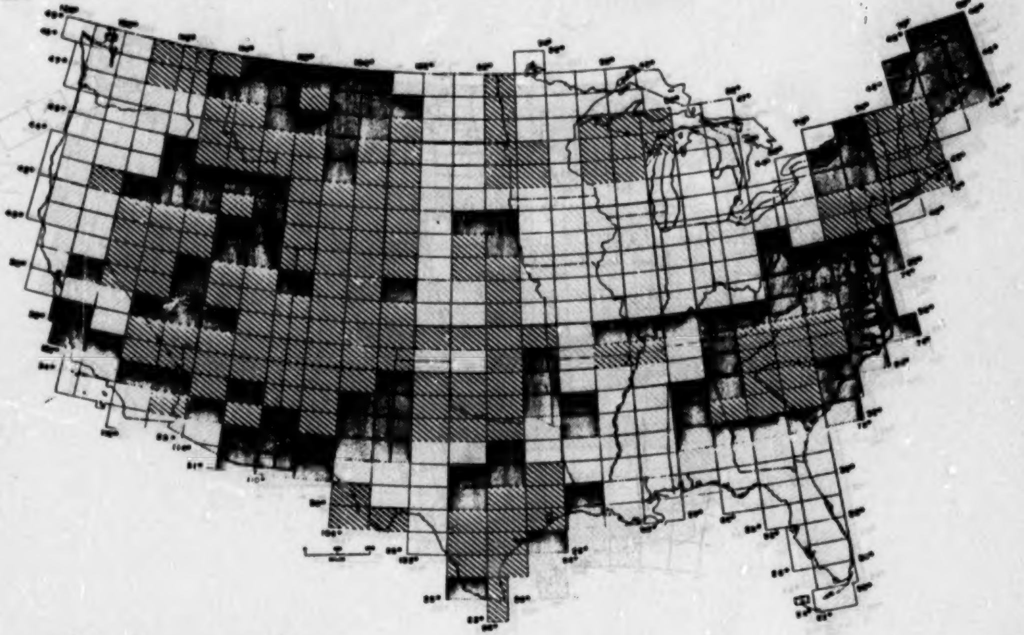

▨ Completed Through FY 1980
■ Flown But Not Completed Through FY 1980
1/30/80

CHART 17

HYDROGEOCHEMICAL SURVEYS



▨ Completed Through FY 1980

■ Sampled But Not Completed Through FY 1980

1/30/80

CHART 18

HYDROGEOCHEMICAL SURVEYS

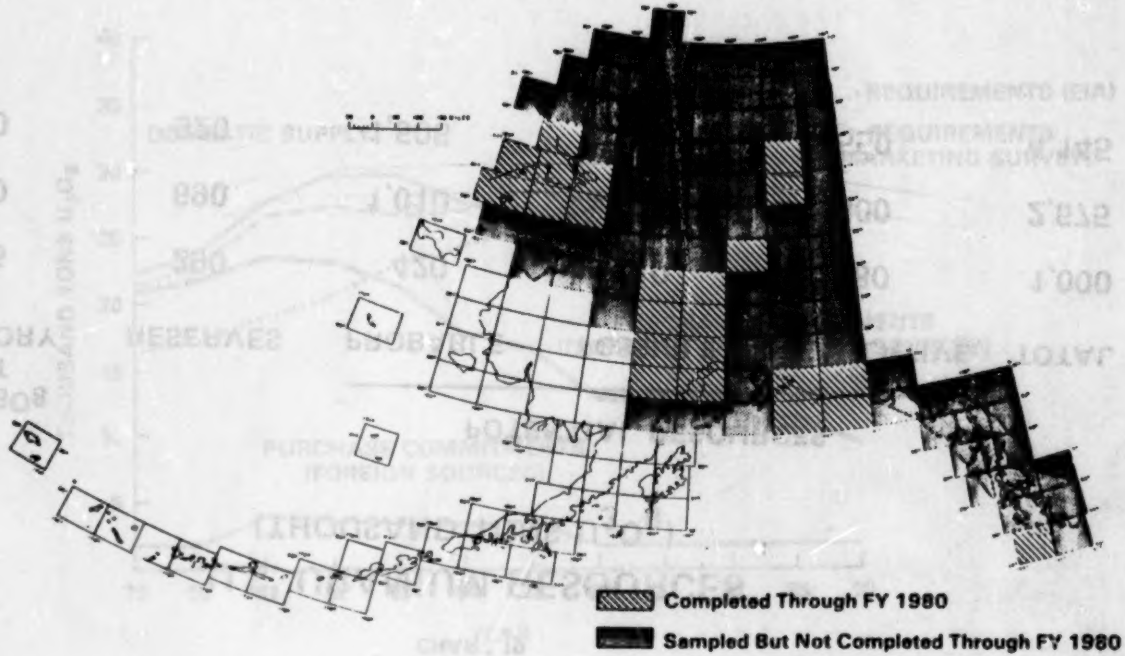

Completed Through FY 1980
Sampled But Not Completed Through FY 1980

CHART 19

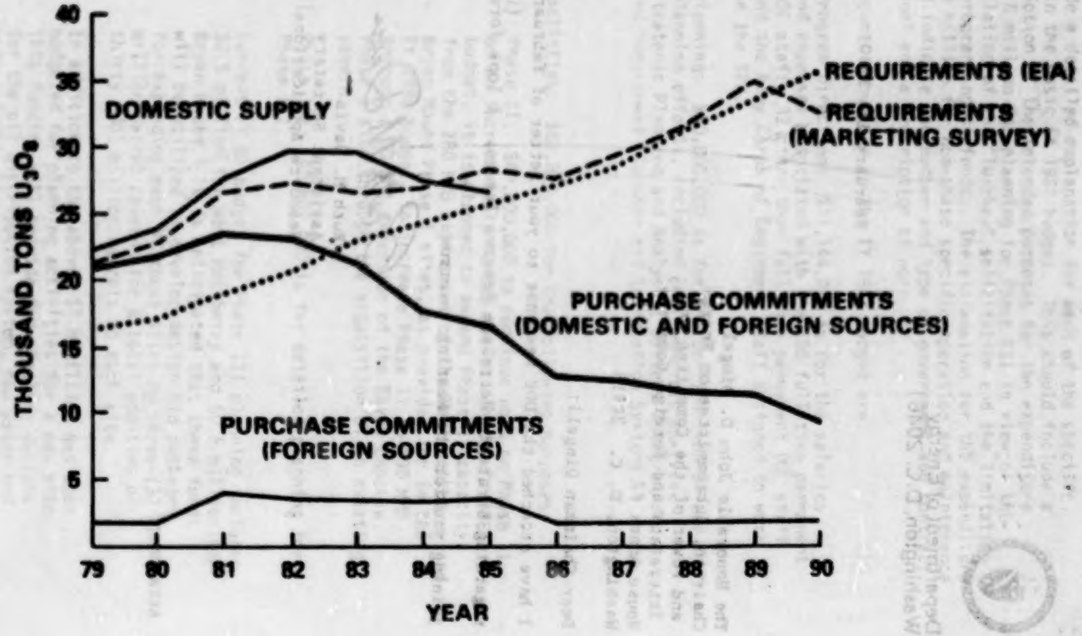
U.S. URANIUM RESOURCES

(THOUSAND TONS U_3O_8)

$/LB U_3O_8 COST CATEGORY	RESERVES	POTENTIAL RESOURCES			TOTAL
		PROBABLE	POSSIBLE	SPECULATIVE	
$15	290	420	210	80	1,000
$30	690	1,010	675	300	2,675
$50	920	1,505	1,170	550	4,145

CHART 20

DOMESTIC URANIUM SUPPLY vs REQUIREMENTS



Department of Energy
Washington, D.C. 20461

February 11, 1980

The Honorable John D. Dingell
Chairman, Subcommittee on Energy
and Power of the Committee on
Interstate and Foreign Commerce
House Annex #2
Washington, D. C. 20515

Dear Chairman Dingell:

I have attached the DOE response to your letter of February 4, 1980 regarding Strategic Petroleum Reserve Issues. I look forward to joining you for the Hearing tomorrow.

Ruth M Davis

Ruth M. Davis
Assistant Secretary
Resource Applications

Attachment

1.0: Provide a detailed explanation for each of the specific sums in the basic FY 1981 budget. This should include a description of the intended purposes for the expenditure of $2.8 million for planning for Phase III in view of the cancellation of the "Turnkey" solicitation and the limitation on reprogramming of funds. The explanation for the expenditure of $40 million for non-phase specific operation and maintenance should indicate the number and type of government and contract personnel and a description of work.

1.A: The amounts requested in the FY 1981 budget are:

(a) Program Direction: $11,144,000 is for the salaries and expenses associated with the 190 full-time permanent DOE staff, 32 other than full time permanent DOE staff and the Army Corps of Engineers staff assigned to work on the SPR.

(b) Planning: $10,000,000 is for the continuation of our planning efforts, including Environmental Analysis Strategic Planning and Analysis, Systems Integration, and Management Planning and Information Systems.

(c) Facilities: $82,834,000 for the following purposes:

(i) Phase II: $40,000,000 to continue work on Phase II on an incrementally funded basis. In the FY 1981 budget, it is planned to expand Phase II capacity from the 280 MMB expansions of the West Hackberry and Bryan Mound Phase I sites, as provided for in the FY 1980 budget, to increase Phase II to 290 MMB through a 10 MMB expansion of the Bayou Choctaw Phase I site through the acquisition of an existing cavern.

(ii) Phase III: $2,802,000 is for detailed planning for Phase III.

Current FY 81 budget for Phase III planning includes $0.5 million for West Hackberry and $0.5 million for Bryan Mound. It is anticipated that these funds will be utilized to develop design bid packages for expanding each of these sites by three (3) ten million barrel caverns for a total addition of thirty (30) million barrels to each site.

In addition to the above, $1.8 million has been budgeted for planning activities for a new site. This funding will provide for pipeline designs for the oil distribution system, raw water and brine pipeline (minimum of on-shore segment).

(iii) Non Phase Specific: $40,032,000 is requested for a new budget category called "Non-Phase Specific". This will encompass those facility development activities not clearly associated with one of the three specific phases. Included in this category are Continuing Engineering, Operations and Maintenance, Safety, Security and Reliability Upgrades.

The $40 million breakdown as follows:

Continuing engineering -$10 million

Operations and maintenance -$20 million

Safety reliability and security upgrades -$10 million

Continuing Engineering involves the utilization of a systems engineering contractor to provide support and systems analysis, system design-integration, system operations planning and systems management. It also includes the use of a geotechnical contractor to provide a coordinated program of geotechnical investigations such as site characterization, engineering design assistance, evaluation and monitoring program developments. The Corps of Engineers will also provide professional technical and management services support as a part of the continuing engineering effort.

In FY 1981 the O&M budget of $20 million is to cover operations, maintenance, spares, utilities, and security for Phase I sites not proposed for Phase II expansion through leaching. Operations and Maintenance for West Hackberry and Bryan Mound are carried in the Phase II development activity, except for some expenses for upgraded security efforts. Manpower will approximate 150 O&M contract personnel and 116 security. Salaries and expenses for all DOE employees associated with Operations and Maintenance are carried under Program Direction.

The safety, reliability and security upgrades involve site improvements to achieve safety and maintain standards above the current base SPR design. Included are communications, physical protection safety enhancements, brine filtering and wellhead control modifications. A systems engineering contractor effort is required for definition of refinements and design in order to assure performance requirements, safety and security policy objectives are met.

(d) Oil Acquisition and Transportation

No additional budget authority is requested for FY 1981 because the unexpended balances of prior year appropriations are sufficient to carry out the oil acquisition effort under the fill rate and price assumptions on which the FY 1981 budget is based.

The reappropriation of an estimated $2.3 billion in oil acquisition and transportation fund is being sought in order to preclude the possible lapse of those funds in the first quarter of FY-1981. The curtailment of SPR fill during 1979 delayed the obligation of these funds and their reappropriation as no year funds would enhance the SPR's ability to execute an orderly oil acquisition process.

2.Q: Provide a basis for the assumption that oil acquisition will begin about June 1, 1980, at 100,000 barrels per day and increase by January 1, 1982 to 250,000 barrels per day. Describe all actions to acquire oil taken by the Department or its agents since January.

2.A: The budget assumes that SPR oil fill rates will average 100 Mbd for the last seven months of 1980 and for 1981, and 250 Mbd thereafter to the extent facility capacity permits.

These average rates represent budget assumptions for use until the potential for SPR oil acquisition becomes clearer and decisions have been made on acquisition rates and approaches. All references to daily rates represent averages, not fill ceilings, floors, or commitments regarding daily deliveries. In practice, actual daily deliveries will vary substantially around the ultimate annual mean.

An RFP for 25.8 MMB of sweet crude was issued December 7, 1978. Offers were due January 16, 1979; this date was extended to February 8, 1979. One hundred seventy-two companies were solicited; twenty-seven responded. Five proposals were received for 6 to 11 MMB at prices above market range.

An RFP for 49.8 MMB of sour crude was issued January 15, 1979 with a closing date of February 13, 1979 which was extended to February 27, 1979. Five proposals were received totalling 29.1 MMB. Prices were above market range.

A spot solicitation for 22.8 MMB was continuous with no offers received.

3.Q: Indicate the present Departmental position and plans concerning the Regional Storage Program.

3.A: On April 5, 1979, the President recommended, as part of his Windfall Profit Tax proposal, the establishment of regional storage for the East Coast (DOE regions 1-4) and noncontiguous storage for Hawaii. Provision for storage for the Commonwealth of Puerto Rico was included in the proposal. The establishment of regional and noncontiguous storage is contingent upon the availability of funding from proposed Windfall Profit Tax revenue. Upon enactment of the Windfall Profit Tax and the SPR Plan Amendment, funding requests will be forwarded to the Congress to secure approval to initiate this effort.

A total regional and noncontiguous reserve of 24.3 million barrels is planned, including the following:

- East Coast (DOE Regions 1-4): 20 million barrels of residual fuel oil (No. 6), or an acceptable substitute for residual fuel oil, will be stored. A minimum of 10 million barrels of this storage will be shysically located in the northeastern portion of the United States.

- Hawaii: 3 million barrels of petroleum (2.3 million barrels of crude oil and 700,000 barrels of kerosene jet fuel) will be stored.

- Puerto Rico: 1.3 million barrels of petroleum (0.8 million barrels of crude oil and 0.5 million barrels of unfinished naptha) will be stored.

4.Q: Detail the expenditure of $400,000 for distribution plan improvements.

4.A: The planning budget line item in the amount of $400,000 for distribution and drawdown planning relates to the ongoing effort to assure that the Strategic Petroleum Reserve (SPR) oil can be effectively drawn down and distributed. While in many instances initial plans have been developed, continuous updates are anticipated as new SPR sites come into service and crude usage patterns within the United States change. Examples of continuing analysis required include updating refinery demand data, reexamination of the SPR Drawdown Management Plan as new circumstances warrant, and developing detailed procedures for SPR drawdown exercise tests.

5(a).Q: **Who is the consultant to the Project Manager for Planning and the Consultant to the Project Manager?**

(b).Q: **What are their specific tasks?**

5(a)(b).Q: **At the present time there are no consultants under contract to the Project Manager. However, during budget development, it was anticipated that consultants would be needed to provide unique expertise in the areas of petroleum, drilling, environmental, quality assurance, and overall systems reliability. It was contemplated that it would be necessary to hire a consultant to the Project Manager. Instead, it was possiple to fill the requirement with a person who was already a Federal employee.**

5(c).Q: **What is the status of the Document Library Center?**

5(c).A: Document Library Center

A Technical Document Control Center has been established within the PMO. This control center has a dedieeted space and prsently contains approximately 4000 documents. These documents include contract drawings, specifications, copies of technical reports, technical criteria, copies of technical contracts, site baseline data, real estate data and all enviornmental permit data and reports.

All the documents have been catalogued in a computerized index, and a purging process is underway to insure only critical items are stored. Accumulation of documents is ongoing and the total projected volume is approximately 10,000.

All geotechnical data is being stored in an interim library at Sandia Labs in Albuquerque, New Mexico. Sandia is the geotechnical engineer for the SPR program, and as such is developing the library of required documents.

It is essential that we have a library of all relevant documentation for the program.

6(a)Q: What disposition will be made of the $1 million for data system support?

6(a)A: The $1 million dollars will be used to provide ADP support services which include: computer time, systems analysis, systems development, computer programming, systems maintenance and equipment rental. The Energy Information Administration has provided support to the Strategic Petroleum Reserve and received most of these funds in the past. This type of support is required and planned to be continued in FY 81.

6.(b)Q: What disposition will be made of the $2.4 million for strategic planning and analysis?

6.(b)A: During 1979, it was decided to reestablish in the Strategic Petroleum Reserve Office a Strategic Planning and Analysis Division. The $2.4 million will be used to acquire contractor support for the preparation of major studies and analyses pertaining to SPR size, oil acquisition and the key planning parameters (crude oil mix, drawdown rate, etc.) which form the bases for SPR program development and implementation. Specific procurement decisions regarding such contractor support have not yet been made.

Additionally the funds will be used for studying the need for, composition and the timing of and the method of financing the fourth 250 MMB.

6.(c)Q: What work will be performed for the $1 million designated for environmental monitoring?

6.(c)A: Over recent years, the Strategic Petroleum Reserve has undertaken an ongoing program of environmental analysis and monitoring, to include EIS preparation, site specific environmental plans, and monitoring of the environmental effects of program implementation during FY 1981. One focus of this effort will be oceanographic monitoring for ocean discharge of brine from West Hackberry which is scheduled to begin in FY 81. Work scope definition will be determined by the EPA permitting process currently underway. However, it is expected than an effort similar to that for Bryan Mound will be required, specifically, determination of brine plume distribution and determination of environmental impacts therefrom.

7.Q: With respect to all contracts awarded since January 1, 1979, provide a list of such contracts, whether by sole source or competitive bids, the amounts of the original awards, the amounts paid to date, all increases anticipated in excess of the original awards and a description of work.

STRATEGIC PETROLEUM RESERVE CONTRACT

February 11, 1980

7. A.

CONTRACT #	CONTRACTOR	TYPE	DESCRIPTION	AWARD VALUE	ANTICIPATED CONTRACT VALUE	PAYMENTS
0001	Woodward & Clyde	M	Environmental Review of Tank Farm Sites	$15,300	$15,300	$11,171
7129	Evaluation Research	M	Analysis of Regional SPR Storage Facility	461,967	461,967	375,331
7146	NOAA	IAA	Baseline Oceanographic Studies	4,344,350	4,344,350	1,276,296
7191	Dames & Moore	M	Environmental Policy Studies in Development of SPR Storage	53,212	53,212	35,504
7192	Science Applications, Inc	M	Study of Alternative Sites for Oil Storage	65,000	65,000	6,217
4011	Dames & Moore	M	Review of Inland Salt Domes in Alabama & Miss.	105,420	105,420	14,559
31200	Information Planning Assoc.	S	Word Processing in 24-Hours	30,000	382	382
31201	Evaluation Research	S	Research & Text Preparation for SPR Annual Report	38,199	38,199	38,199
31302	Modern Talking Pictures, Inc.	C	Film Distribution	15,650	15,650	15,650
31306	Martin Thomas Co.	S	Simulation Models	27,382	27,382	9,706
7151	KRB, Inc	M	Analyses of Crude Oil Samples from Converted Potash Mines	144,928	144,928	0

C - Competitive
S - Sole Source
M - Modification
IAA - Interagency Agreement

February 11, 1980

STRATEGIC PETROLEUM RESERVE CONTRACT

7. A.

CONTRACT #	CONTRACTOR	TYPE	DESCRIPTION	AWARD VALUE	ANTICIPATED CONTRACT VALUE	PAYMENTS
31305	Adam Borison	S	Research for Policy for USE OF SPR	$9,130	$9,130	$9,130
31306	Duval Webster	S	Analyses & Modification of Industry-wide Linear Model	9,960	9,960	9,960
7192	Science Application	M	Modification to Increase Funds for Implementation of CEQ Regulations	10,541	10,541	0
	Bartlesville	IAA	Research Support for SPR	200,000	200,000	0
978	U.S. Treasury Dept.	IAA	Customs Duties (Incurred before June 79 but still outstanding)	1,638,775	1,638,775	0
8331	DOE - Defense Supply Center	IAA	Administrative Services for Oil Acquisition	3,056,626	3,056,626	1,514,331

C - Competitive
S - Sole Source
M - Modification
IAA - Interagency Agreement

7A.

CONTRACT #	CONTRACTOR	TYPE*	DESCRIPTION	AWARDED VALUE	ANTICIPATED CONTRACT VALUE	PAYMENTS
10066	Jacobs-D'Appolonia	C	Design & field engr. for SPR sites & ESR dome sites.	5,500,000	8,617,530**	3,007,562.93
31801	PB-KBB	C	Planning preliminary & conceptual design & Geotech investigations.	5,253,260	5,253,260	2,632,488
10023	Koch Shipping	S	Oil terminalling & transportation.	8,200,000	8,200,000	6,508,062.02
10080	Texas Oil and Chemical	C	Surge tankage.	-0-	-0-	-0-
10064	Corps of Engr.	IAA	Management & tech. services.	1,512,014	1,512,014	631,014.71
10000	Dravo Utility Constructors	C	Operations and maintenance of SPR sites, leach/fill of BM.	42,853,183	69,808,000***	39,155,807.25
10007	Williams Bros. Engr. Co.	S	Drilling Operations Analysis	120,669	120,669	120,669

* C - Competitive 8(a) - Minority Small Business
S - Sole Source IAA - Interagency Agreement
** Exercise of an option
*** Exercise of Bryan Mound leach/fill option, and estimated change orders.

7.A:

CONTRACT #	CONTRACTOR	TYPE	DESCRIPTION	AWARDED VALUE	ANTICIPATED CONTRACT VALUE	PAYMENTS
10017	SBA (Malissa)	8(a)	Mailroom, WPC, Telex	338,179	338,179	134,417.02
10022	University of New Orleans	S	Environmental assessment of fire & oil spill.	365,039	365,039	248,421.10
10091	SBA (Montegut and Rabb)	8(a)	SPR property accounting manual.	30,352	30,352	12,141.00
10104	Amoco Pipeline Co.	S	Access to end alkali ditch.	100,000	100,000	-0- ****
10114	Texas A & M Research Found.	S	Eval. of brine disposal from the BM SPR site.	2,591,229	2,591,229	432,696
10157	University of New Orleans	S	Coop. agreement for internship program.	9,520	9,520	-0-
10158	Tulane University	S	Coop. agreement for internship program.	15,000	15,000	-0-
10139	The Aerospace Corporation	S	Systems eng. services.	6,999,737	6,999,737	948,369.49
10168	Technadril	C	Drill & leach/fill holes at WH.	24,612,473	24,612,473	-0-

**** Contract with $100,000 contingent liability, liability never incurred.

7.A:

CONTRACT #	CONTRACTOR	TYPE	DESCRIPTION	AWARDED VALUE	ANTICIPATED CONTRACT VALUE	PAYMENTS
31303	Mardata	S	Subscription to charter fixture library, ship library & tanker casualty library.	29,040	29,040	21,833
10052	Sunoco Terminal	S	Temporary crude oil storage.	280,000	280,000	243,766.29*
10028	Charles C. Patton	S	Brine disposal analysis.	46,900	46,900	41,151.31
10035	Tulane University	S	University support service.	6,600	6,600	4,668
10056	University of New Orleans	S	University support service.	10,000	10,000	8,738
10116	University of New Orleans	S	University support service.	6,700	6,700	5,198
10117	Tulane University	S	University support service.	1,400	1,400	-0-

* Final price of contract.

CONTRACTS FUNDED THROUGH INTRA-DEPARTMENTAL
FINANCIAL PLAN TRANSFERS OR
THROUGH JOINT PROCUREMENTS WITH OTHER
DOE ENTITIES

DOE Entity/Contractor	Type		Award Value	Anticipated Contract Value	Payment
DOD (DCAS)	IAA	Admin. Services	86,000	86,000	86,000
Policy & Evaluation/Sobotka 2834	M	Study of Federally-Owned Crude Oil to Fill SPR Reserve	19,650	19,650	17,626
Policy & Evaluation/Sobotka & Co. 70033	M	Analysis of U.S. Refining Flexibility	15,000	15,000	0
Policy & Evaluation/ICF, Inc. PE-70015	M	Use of Domestic Crude in SPR - Task Order	36,000	36,000	0
Bartlesville	HTA	Research Support for SPR	200,000	200,000	0
Albuquerque/Sandia	FP	Geotechnical Support	5,686,400	5,686,400	1,258,964
Albuquerque/Sandia	FP	Security Criteria	400,000	400,000	0
Idaho/EG&G Inc.	FP	Aerial Survey Services	7,000	7,000	7,000
Lawrence Livermore Lab	FP	Brine Disposal Study	793,000	793,000	758,810
Nevada/EG&G Inc.	FP	Aerial Survey Services	222,000	222,000	98,813
Oak Ridge/Union Carbide	FP	Computer Support of Environmental Study	75,610	75,610	75,240
Argonne National Labs	FP	Turnkey SEB Support	55,000	55,000	54,839

2/11/80

HTA = HQ Transfer Allotment
FP = Financial Plan Transfer
M = Modification

8.Q: Provide an explanation of the disposition of funds which have previously been reprogrammed and a statement with respect to whether any further reprogramming is intended or may be anticipated.

8.A: Reprogramming

During FY 1979, Congressional committees approved a reprogramming of $529,214,000 of oil acquisition and transportation funding to permit completion of Phase I development, construction of Phase II development through FY 1980, and acquisition of engineering services associated with expansion beyond Phase II.

In acting on the FY 1980 SPR budget, Congress approved a further reprogramming of $20,391,000 in oil acquisition funds: $12,000,000 for planning and $8,391,000 for program direction.

A further reprogramming request is associated with the FY 1981 budget. One element of this reprogramming involves the use of a further $2,449,000 in oil funding for program direction, and the other element is the use of $15,000,000 in Phase II levels to meet increased Phase I costs identified during the past year. In addition, the request includes a further reallocation of Phase II funds to Phase I if required to meet over budget real estate coordination awards.

9.Q: Provide a description of funds actually spent in fiscal year 1979 and for the first quarter of fiscal year 1980.

9.A: SPR obligations for FY-79 are as follows:

	($ millions)
Program Direction	$ 8.4
Planning	14.2
Facilities	
Phase I*	186.2
Phase II	139.1
Phase III**	13.5
Subtotal	$338.9
Oil Acquisition and Transportation	420.0
Total	$781.4

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* Includes withdrawal engineering.

** Represents funding for A/E Services.

These $338.9 million in facilities obligations were primarily for Phase I construction, initiation of Phase II drilling and construction activities at the Bryan Mound site, and for site operations and maintenance, including oil fill operations and interim drawdown facilities construction and testing. A/E Services funding was utilized primarily for Phase III conceptual design and feasibility studies. Oil acquisition and transportation obligations were primarily for oil acquisition orders ($403 million) placed with the Defense Fuel Supply Center in the first quarter of FY 1979.

Actual obligations for the first quarter of FY 1980 were nearly $10 million, as follows:

	($000)
Program Direction	1,501
Planning	295
Facilities	
Phase I	39[illegible]
Phase II (primarily long-lead equipment for West Hackberry	3,522
Phase III - A/E Services (primarily for geotechnical analyses by Sandia Laboratories	3,760
Subtotal, Facilities	7,680

Oil Acquisition and Transportation (Final Settlement of terminalling contract with Petro United)	517
	$9,993

Major Phase II construction and drilling contracts for West Hackberry are expected to be awarded on the second quarter of FY 1980.

Over $80 million in costs were incurred during the first quarter of FY 1980, primarily from contracts awarded in FY 1979. This includes Phase I costs of nearly $30 million, Phase II costs of $33.6 million, and a $15 million payment to the Department of Defense for oil delivered in FY 1979.

10.Q: Indicate what measures have been taken to control fraud and abuse in the program since January 1, 1979.

10.A: The SPR initiated a security program in January 1979 which was directed at protecting Government property and program assets. To achieve this, SPR established a three-person security branch which has the mission of determining standards and policy, and performing an overview (audit) responsibility.

The O & M contractor has been authorized a six-person security department which has the mission to implement the DOE-approved security program.

During the year, the contractor guard force was consolidated into a single unit from merging five small contracts. The consolidation has given the program a professionally trained and supervised protective force, which performs in a consistent manner from site to site.

To better control site access, the construction of site fencing was expedited on all SPR facilities. Presently, five of the six sites are fenced.

In addition to property protection, SPR established a property accountability function. The office has one full-time DOE employee who controls and coordinates the efforts of the construction manager (P-G) and O&M (DUCI) contractors.

To date, the following actions have been initiated:

Property and stock control systems of the Construction Manager and O&M Contractor have been reviewed and comments furnished the Contractors as to requirements to have acceptable property control systems.

Actual inventory of construction-type property (i.e., pipes, valves, drill bits, etc.) and the Construction Managers operating property and equipment (i.e., desks, typewriters, etc.,) has taken place at Bryan Mound, West Hackberry, Bayou Choctaw, and St. James. Inventory is in process at Sulphur Mines and Weeks Island.

11.Q.: Explain the Departmental position on Section 196 of S.932, the "Dole-Bradley Amendment."

11.A.: The SPR's current oil inventory would serve only as a limited response to near term supply interruption. Given the uncertainties of future world oil market conditions, there is an increasing need to provide the SPR with a steady source of supply in order to complete fill of the storage facilities. DOE agrees that the SPR should be filled expeditiously while seeking to minimize the effects of SPR purchases on world oil prices and on the availability of supplies for domestic consumption.

12.Q: Explain any measures taken to permit private industry to use the St. James terminal to reduce costs and to keep the facility operational?

12.A: The Strategic Petroleum Reserve (SPR) has recognized the potential economic and operational benefits of allowing commercial use of DOE facilities during those periods when such facilities are not in full use by the Government. The primary requirement in any such arrangement would be the retention by the Government of rights to full use of the facilities as necessary to meet the mission of the SPR.

The Department has initiated action to address the legal, environmental, business and other issues related to the commercial use of St. James and other SPR facilities. For example, a major consideration in the decision to lease the facilities will be the environmental impacts from increased use of the facilities. Greater use of the facilities will mean increased hydrocarbon emissions within an area in which hydrocarbon emissions exceed the national ambient air quality standards and which the EPA and the State of Louisiana have designated a nonattainment area. In addition, there will be increased risk of oil spills. Originally, in preparing the environmental impact statements and in applying for all necessary environmental permits for St. James, it was assumed that operations would be intermittent and short-term. The assessment to determine the potential impacts and whether a new environmental impact statement and new permits will have to be obtained before the facilities can be used by private industry.

13.Q: Identify current plans on the proper size of the Reserve (i.e., 500 million vs 750 million vs 1 billion barrels).

13.A: The Administration continues to believe that the level of protection provided by a billion barrel reserve is needed, but decisions on the timing and composition of the last 250 MMB have been deferred. If a one billion barrel Government reserve were to be developed, it would probably not be completed until the early or mid 1990's. The current estimate for the total cost of a 750 MMB SPR is $36 billion.

14.Q: Describe the role Policy and Evaluation (PE) has played with respect to SPR long-term planning and the PE relationship to SPR management. What portion of PE budget is included in the SPR budget? What is the future role of PE in SPR long-term planning. What portion of PE's manpower time is allocated to SPR-related work?

14.A: The respective roles of Policy and Evaluation (PE) and the Strategic Petroleum Reserve Office (SPRO) have been and will continue to be evolving as internal reorganizations and staffing levels of both offices have changed. During most of 1979, PE was responsible for overall energy emergency planning and for definition of key SPR long-range planning parameters such as SPR size and drawdown rates. In 1980 a partial staff for a Strategic Planning and Analysis Division was authorized in the SPRO. Staffing of that Division has been initiated. During 1979, the SPRO Management and Systems Divisions shared responsibility for definition of long-range budget requirements which, in the case of oil funding projections, involved consultation with Policy and Evaluation on price forecasts.

During 1980, SPRO is bearing the responsibility for long-range program planning within the context of the PPBS process, and, PE bears the responsibility for overall management of the PPBS effort as well as developing issue analyses relative to the SPR submissions, as it does for other DOE programs. Policy and Evaluation will continue to be responsible for integration of the SPR program plans into overall energy emergency planning and for developing key planning parameters such as oil price forecasts.

Specific SPRO/PE fund transactions have included use of SPRO funds for the salaries of the staff transferred to PE from SPRO in early FY 1979, the transfer of $190,000 from PE to SPRO in FY 1980 to cover the costs of the five positions being transferred back to SPRO to permit creating of the new Division, and SPRO participation in and partial funding of some PE contracts for studies pertaining to SPR issues. Such joint funding of studies is carried out on a case by case basis.

PE allocates 2 man years of its manpower time to SPR related work.

15.Q: Explain what consideration has been given to filling the SPR by using: (a) royalty oil, (b) Naval Petroleum Reserves?

15.A: (a) The option of filling the SPR with Federal royalty oil has been under continual reassessment since the outset of the SPR program. Under this option, the Government would take oil in kind rather than monetary payment for the Government's royalty share of oil produced offshore or from Federal lands. This option is not considered attractive in comparison to other options to acquire oil for the following reasons:

- Of the approximately 190,000 barrels per day production, 109,000 barrels per day is used by small refiners, for whom the purchase agreements are valuable "bankable" assets to secure credit and exchange for other crude oil. Denial of royalty oil to small refiners could be especially harmful to them.
- There would be significant administrative and logistical workload involved as there are approximately 12,000 leases involved in 18 different states. Also, much of this oil is unsuitable for SPR storage and would have to be exchanged.

(b) Use of the Naval Petroleum Reserves to fill the SPR is presently under active consideration.

Madam Secretary, I think it would help the reporter if you were to identify your new people at the table.

Mrs. DAVIS. The two people on my right are Dr. Stanley Weiss, who is Deputy Assistant Secretary for Industrial and Utility Applications and Operation, and Mr. William Voigt, who is Director of Office of Uranium Resource Enrichment.

Mr. WARD. In order to save time, I will just ask questions on the basis of your prepared statement. Last year you estimated that there would be an $82 million surplus from your operations. Now, since then, you have experienced a $54 million increase in power cost and you are projecting an additional $250 million decrease in revenues meaning that you have turned a projected $82 million profit into a $250 million loss in a single year.

I am curious as to how this happened.

Mrs. DAVIS. There are two main reasons for that. One is the increasing cost and amount of energy to be purchased for our ongoing facility operations. The other is the fact that we are having certain contracts terminated and deliveries shipping in the near-term, and are not having the same amount of enrichment service revenues as we anticipated.

We have had nine international contracts terminated in the last year.

Mr. WARD. $250 million worth? You get a termination charge when they terminate the contract, but how——

Mrs. DAVIS. There are two facets and, having given you that, I would ask Mr. Voigt to tell you the details.

Mr. VOIGT. Of the supplemental request for $307 million that we are requesting in fiscal 1980, as you stated, $253 of that was associated with decreased revenues. The major fraction of that revenue decrease was due to adjustments made by the requirements of contract holders. They can inform us of changes in product delivery schedules by giving us only a 180-day notice. The spring projection, which was the basis on which we formulated our budget, assumed less slippage in nuclear powerplants than has actually occurred.

In addition to that, during the last year, customers were in the process of converting from long-term fixed commitment contracts to adjustable fixed commitment contracts. Up until the September 30 deadline, customers were still adjusting the projections of amount of separative work they require for nuclear powerplants.

Hence, this constituted the $253 million decrease in revenues. So far as 1981 is concerned, inasmuch as we have now firmed up our AFC contracts, we know for the AFC contract deliveries for the next 2 years. There is still uncertainty related to the requirements contracts, although we have attempted to be conservative in our revenue estimates for 1981.

Mr. WARD. There are two issues here. One is that there are changes going on in the market when you were converting to another type of contract, but there is another issue and that is the one of management. You came up here and said you were going to make so much money and you expected so much revenues and you were a quarter of a billion dollars off.

I am concerned about you coming up here and saying, "This is our projected budget, these are our expected revenues and we are going to make $82 million." And, you turn around and within a year you come back and you are telling me, "We did not make $82 million. We are going to lose $25 million."

I get concerned about figures of this magnitude.

Mrs. DAVIS. Let me assure you that as responsible officials we are even more concerned, but I think that what you are seeing is a kind of curve where in previous years we saw an increasing demand for service both from the United States and from foreign customers, but we are now seeing the first signs of several actions.

One is the reality that the nuclear program in the United States is indeed changing in two important ways. One is the decreased use of nuclear reactors now and the second is that it takes much longer to put them in operation.

Simultaneously, you are seeing the international impact of the nuclear nonproliferation policy which we want very much to have adhered to by our international customers.

Those two impacts, I think, are being felt most solidly in the year or two to which you are referring.

We are now projecting decreased demand for separative work and reducing production from our plants to more closely balance decreased revenues and decreased energy costs. You will also see coming on line in 1988 a much more cost-effective service plan, namely the gas centrifuge plant. I believe that it is essentially a one-time occurrence that you are seeing which will be spread in large part over a period of 1 to 2 years in its primary effect.

Mr. WARD. Well, this year you are projecting a loss of $87 million. How much more could you lose this year is what I want to know.

Mr. VOIGT. As I indicated earlier, in terms of AFC contract holders, the revenues are firm for 1981 and even 1982. There are still elements of uncertainty in requirements on contract demands. The contract requirements stipulate that the customer can give us a 180-day notice and change their demands for enrichment service. But, in assessing that fraction of the revenue picture coming from requirements contracts, we have been conservative. This is not to say the Nuclear Regulatory Commission might not invoke some regulations which could effect nuclear power and hence effect our revenues.

Mr. WARD. You did not give me any figures in there.

Mrs. DAVIS. It is very difficult. I would come to Mr. Voigt's rescue and say we are talking about a marketplace where the conditions for setting of demands are largely external. The continuing policy of other countries, which is primarily toward getting their own indigenous sources of uranium enrichment, and concern over our nonproliferation policy status in the next year are examples of these external factors. I would say you have as good an estimate as you used to see in the past which is roughly in the 95-percent confidence range.

Mr. WARD. Part of your problem is you attributed to declining demands. Two years ago your Department came up and said demand was growing and you needed to spend $8 billion to build a new enrichment plant. We questioned that—not all of us, but some of us here—and by the time you got to the Appropriations Committee, you said you did not need to build it right away, you could spread it out.

Now, you are in a position where you have surplus capacity that you are not using. Two years ago you came in and said, "We have to build a new plant." Now, you are sitting there with surplus capacity that you could be using to build a stockpile.

I see last year's $300 million error as part of a pattern.

Mrs. DAVIS. I think it is not part of a pattern. I would like to make that clear on the record. I would also point out there were two main reasons for saying we would like to go to a new gas centrifuge plant.

One of those is where, as our assessment of demand has not proven to be accurate as we would like it to be, there is still sufficient demand to support continued capacity expansion.

The second was the introduction of new technology for two purposes. One, the technology in this new plant uses only 5 percent of the energy of a comparably sized gaseous diffusion plant. That means we can achieve a tremendous benefit in cost because our current major cost is energy. And, the second aspect of that is with this more cost-effective technology, we can be more competitive with the increasing number of suppliers in the international marketplace.

If you take these two statements and put them together, it is my opinion that we are still further ahead in producing the new technology and getting a gas centrifuge plant in place for its first modular use by 1988. I have asked for and we are simultaneously developing plans to phase out the diffusion plants when this becomes feasible. You will see a continual adjustment between demand and supply which is typical of any business organization.

At the moment, I am assuming that the risk of slight oversupply in this area is less than the risk of a slight undersupply. For that reason, I feel quite comfortable with the fact that we will be operating at slightly oversupply as opposed to undersupply.

Other than that, I think the demand and supply curves that you have in the answers to your questions are pretty well matched for a business organization.

Mr. WARD. You mentioned another factor there about the power of supply. I noted another thing in this budget. You cut back your production to such a level that your power requirements are below your contractual demand requirements and you have $43 million in there to purchase power you will not use.

Mrs. DAVIS. It makes good business sense, when the demands decrease at a rate greater than you anticipate, you have a short-term adjustment and it is costing us $43 million.

Mr. WARD. Just write it off, right?

Mrs. DAVIS. It is a writeoff to externalities of a marketplace which both business and Government have had to recognize forever, but it will be recovered in separate work charges.

Mr. WARD. What is the incremental cost of using this power to produce enriched uranium?

Mrs. DAVIS. I am not sure I understand your question, so I will turn it over to Stan.

Mr. WARD. You are going to pay $43 million for power you are not going to use. Why not use it?

Mr. WEISS. We would have to add substantially more than $43 million in order to avoid demand charges. That would produce SWU's that would obviously go into inventory and would increase our inventory at a time when demand is down.

Mr. WARD. But, you are using it up to build a supply and you are building it up at a time when rates are cheaper. The rates are not going to get any cheaper and I wonder what the incremental cost of producing this is? Since power is the biggest cost of your operation, why not use it particularly since you lost 5 million SWU's of production this year, $43 million—that comes out to roughly equivalent of 500 million SWU's.

Mr. WEISS. Bill, you have the figure on how much additional power we would have to purchase in order to eliminate all demand charges.

Mr. VOIGT. To eliminate the $43 million in demand charges would require us to purchase $127 million more power in fiscal year 1981. I might add, Mr. Ward, we are now negotiating with each of our power suppliers to try to get out of this demand charge.

Mr. WARD. I understand that, but we had a briefing last year and the same question came up. At that time you were in the process of negotiating decreased demand charge and here you are again and there is $43 million in there because you have not yet negotiated those decreased demand charges.

Mr. VOIGT. That is correct as of now.

Mr. WARD. Then, I read further in this statement that you may only produce 10.2 million SWU's because TVA may put a power demand on you some time this summer. How does that balance out against the demand charges your are going to pay? It is on page 7 of your statement. TVA has option of cutting you back, right, if they need the power?

Mr. VOIGT. There is a provision in the contract which permits TVA to take seasonal power reductions, that is correct.

Mr. WARD. Would that be balanced against the potential $43 million you are going to have to pay TVA?

Mr. VOIGT. If they elect to not take the seasonal reduction, then, of course, we have to pay both the demand as well as the energy components of that charge. The demand component only comes in the event we drop below contract power levels.

Mr. WARD. But, is that based upon a monthly use or a yearly use?

Mr. VOIGT. It is based on a monthly use.

Mr. WARD. So, let me get this right—you could wind up paying $43 million for power you did not use and at the same time be cut back to have your power diverted elsewhere without being repaid out of that $43 million?

Mr. VOIGT. That is correct, but I must also point out DOE also has the right for seasonal power reductions as well. And, we are exercising those options in the 1981 budget.

Mr. WARD. For supplemental power reductions?

Mr. VOIGT. Yes.

Mr. WARD. What is a supplemental power reduction?

Mr. VOIGT. Seasonal.

Mr. WARD. How long is this going to go on? Next year, are you going to sit here and say, "You know we are decreasing production and they are increasing rates and——

Mrs. DAVIS. I think what you really mean is are we going to see another sudden change from increasing demand to decreasing demand or a sudden change to some other scenario? My answer is, I don't think we will be seeing another sudden change where these costs would have to be incurred.

We do a reactor by reactor analysis and a country by country analysis. We update it yearly.

Mr. WARD. How long have you been doing this?

Mrs. DAVIS. We have done it for 2 years. This will be a third one. You are seeing now a typical demand analysis, and presumably, since we are on a decreasing demand curve, you would not see this kind of change occurring in the near future.

Mr. WARD. On page 6 of your testimony, you talk about the good things you are doing and you have this power recovery program that could enhance diffusion plants, electric power requirements 2 to 6 percent. This is going to cost us an additional $40 million, but you have this recovery program going on that reduced your electric demand, where we get hit with demand charges because you are not using enough power.

Is this a counterproductive item?

Mr. VOIGT. Our contractual arrangements are such with TVA and EEI and OVEC that in the out years, about the mid-1980's the contracts will have to be renegotiated so there is flexibility within this framework to define the future power supply is to the diffusion complex.

Mr. WARD. When is the next renegotiation of this contract, your TVA contract and your OVEC contract?

Mr. Voigt. I would like to supply that for the record.
[The following information was received for the record:]

CASCADE POWER CONTRACTS

Supplier	Contract Expiration Date	Time to Commence Negotiations To Extend Contract [1]
Tennessee Valley Authority (TVA)	June 1995	Mid-1980s
Ohio Valley Electric Corporation (OVEC)	October 1992	Mid-1980s
Electric Energy Incorporated [2] (EEI)	May 1993	Mid-1980s

[1] Negotiation period must provide sufficient lead time for the construction, if necessary, of additional generating capacity.

[2] Base contract expires in December 1989, but provides option to extend through May 1993 provided DOE notifies EEI in writing before June 1983.

Mr. Voigt. We now have before Congress a modification to the OVEC contract which extends the contract through 1992. I believe the TVA contract extends into the mid-1990's.

Mr. Ward. Does the OVEC contract allow a decrease in the demand requirements, so that you would not be faced with this?

Mr. Voigt. That is correct.

Mr. Ward. So the $23 million that is in your budget for demand charges to OVEC would be eliminated if this contract were signed; is that what you are telling me?

Mr. Voigt. It is a separate type of negotiation.

Mr. Ward. When does this new contract take effect?

Mr. Voigt. It would take effect in April of this year.

Mr. Ward. It would take effect in April of this year; but yet you have a budget request that begins in October of this year?

Mr. Voigt. When I say takes effect in April, that is when we would enter into the new contract. This power contract will then cover the period from 1980 to 1992. Short-term power reductions are negotiated separately.

Mr. Ward. In your statement, on page 12, you make an interesting comment: "One of the major functions of the enrichment activity is to be the sole supplier of all enrichment service to domestic, civilian nuclear reactors." Is that a requirement of law or is that a program objective, some American company could buy?

Mrs. Davis. It is not any kind of requirement by legislation; we have established the objective that the Government be the sole supplier domestically of uranium enrichment services to domestic markets.

That does not preclude foreign suppliers, and we are beginning to see them start to assess our domestic marketplace.

Mr. **Ward**. You have referred a couple of times to the fact you have lost 10 contracts overseas.

Mrs. **Davis**. Nine; same difference.

Mr. **Ward**. You attributed this to Nonproliferation Act requirements and the desire to support the domestic enrichment industry overseas?

Mrs. **Davis**. I think we had other indications as well based on discussions of my uranium enrichment staff with the overseas buyers. One of the major reasons is uncertainty about U.S. Government policy and export control.

Mr. **Ward**. Are they underselling you?

Mrs. **Davis**. Cost is not the major consideration, as it often is, not in our country. At the same time, I would say the costs or the prices, depending on your point of view, are not made public. They are negotiated between the supplier and the buyer. We don't know exactly what they are; but our best marketplace indication would be that they are considerably higher than ours. In addition, with the new centrifuge plant on line, we can be even more competitive in price.

Mr. **Ward**. It is still your intention to reduce the stockpile to about 14 million SWV's by 1990?

Mrs. **Davis**. Yes.

Mr. **Ward**. And you will be drawing down periodically as your table shows. How much did you draw down last year?

Mr. **Voigt**. On net effect, we are adding to the stockpile in 1980 about 1.3 million SWU's. In 1981 we will be drawing down a like amount from the stockpile. That is the difference between production and sales.

Mr. **Ward**. You last year ran some tests on your centrifuge technology and had a problem with some material. Have you corrected that problem?

Mr. **Voigt**. Yes, that problem has been corrected. The AETF, which is the facility to which you are referring, is back in operation and operating exceedingly well.

Mr. **Ward**. It had five failures last year. Have you had any failure this year?

Mr. **Voigt**. We have had no additional failures.

Mr. **Ward**. As I recall, you had 16 tests last year, 16 operating?

Mr. **Voigt**. We now have 15 machines in operation.

Mr. **Ward**. And no failures so far this year?

Mr. **Voigt**. No failures thus far.

Mr. **Ward**. For the last month and a half. What is this year? Are you talking calendar year?

Mr. **Voigt**. No. The AETF became operational back in the latter part of December. So we have been operating since then.

Mr. **Ward**. Is the centrifugal plant on schedule?

Mrs. **Davis**. It is on schedule for the first 2.2 million SWU's by 1988.

Mr. **Ward**. Did the strikes out there have any effect on plant construction?

Mrs. **Davis**. No. The only impact it had was a slight one on production at the gaseous diffusion plant. It had impacts on the improvement and upgrade programs which we call CIP and CUP. It delayed that until 1983, roughly by about 18 months.

It had no impact on the gas centrifuge program.

Mr. **Ward**. Let's move on to the uranium resource assessment program.

First, your budget is substantially lower this year than the previous years than one might have expected. Why is that?

Mrs. **Davis**. It is lower because the administration believes that the decreased demands, and the greater feeling of comfort about the availability of resources did not justify continuing of the assessments at the same rate as we previously planned.

Mr. **Ward**. Who initiated the decrease?

Mrs. **Davis**. The Office of Management and Budget.

Mr. **Ward**. What was your request to OMB for this program?

Mrs. **Davis**. I believe we said it was $64 million.

Mr. **Voigt**. Same level as 1980.

Mr. **Ward**. They cut you back?

Mrs. **Davis**. They cut it by the amount you see, so we have a program considerably less.

Mr. **Ward**. What was their explanation as to why they cut this back?

Mrs. **Davis**. I believe it was that which I gave you.

Mr. **Ward**. Did you appeal this?

Mrs. **Davis**. I don't know.

Mr. **Weiss**. No, there was no formal appeal on this. We reconciled the program design to the level OMB came up with.

Mr. **Ward**. You passively accepted it, or actively accepted it?

Mr. **Weiss**. The program has been essentially redesigned to recognize that we will have fulfilled in 1980 that which we set out to—that is, we will complete the 116 primary quads which were established as the goal for giving the basis for decisions on the breeder.

That decision on the breeder now is deferred as a necessity well into the 1980's, so we are able to stretch the program out.

Mr. **Ward**. Was that the objective of the program?

Mrs. **Davis**. It was the objective for the time schedule——

Mr. **Ward**. Maybe I should clarify what I mean by objective. My reference was to the decision as to the breeder, rather than as to the surveillance of a certain number of quads.

Mrs. **Davis**. My comment was that the surveillance and the determination of U.S. resources were separate from the breeder. The time schedule on which we were to try to survey a certain percentage of the U.S. natural resources was tied to the then intended breeder decision of 1981, which is no longer existing as a requirement.

Mr. **Ward**. Was there any indication that you were cut back because there is a desire on the part of OMB not to find out exactly what our uranium resources are?

Mrs. **Davis**. No.

Mr. **Ward**. The figures that have come out show that your estimate is that there are 920,000 short tons available. A lot of people have challenged those figures. I think the National Academy has challenged them. Mr. Voigt is shaking his head no. Some people at the National Academy have challenged those figures, and there has been some accusations that the actual amount of recoverable uranium is only half of that, 420,000.

Mrs. DAVIS. I think you will find, and I will let Bill answer, during the National Academy study there were a lot of resource numbers that were fed into them, in addition to ours, the final report is absolutely consistent in its final numbers with the DOE estimates, because the academy felt we had the best data available. By best I mean the most credible.

Mr. VOIGT. The study that was recently published has accepted the 2.4 million tons that we have classified as reserves, and probable potential resources.

Mr. WARD. Now, you use the figure of $30 as recoverable cost; that is your forward cost, right?

Mr. VOIGT. Correct.

Mr. WARD. That includes labor, transportation, and cost of mining, not operating the mine, digging the mine, right?

Mr. VOIGT. It does not take into consideration sunk costs.

Mr. WARD. It does not take into consideration Federal and State income taxes, right?

Mr. VOIGT. It does not include Federal or State income taxes or return on investment.

Mr. WARD. Or severance taxes?

Mr. VOIGT. Correct. Severance taxes, as a direct tax, are included.

Mr. WARD. So, if you have a forward cost of $30, what would be the market cost?

Mr. VOIGT. A rule of thumb we have used is about 1.7 times the forward cost, but that will vary from grade to grade. So that really says a $30 forward cost—you are saying something on the order of $50 or so.

Mr. WARD. $50. What is the price now?

Mr. VOIGT. Right now the current price is on the order of $40 per pound.

Mr. WARD. How much drilling is going on in the United States now? Is it in your testimony somewhere?

Mr. VOIGT. 38 million feet last year.

Mr. WARD. Which is 20 percent less than the year before?

Mr. VOIGT. It was less than 1 year before.

Mr. WARD. And it is expected to be lower this year?

Mrs. DAVIS. Yes.

Mr. WARD. Do we have enough uranium to feed our reactors?

Mrs. DAVIS. Yes; that is one of the very key factors that we have considered.

Mr. WARD. We have enough. Well, we have enough on paper; we will have enough from domestic sources—is this a "could" or a "would" situation?

Mr. WEISS. The figures that we are dealing with, the 2.4 million tons most probably available, provides sufficient coverage for domestic reactors well into the early 2000 period.

We are seeing this decrease in mining activity because of the decreased demands and uncertainties; but the deposits are certainly not presumed to have decreased in quantity.

Mr. WARD. Without vouching for their credibility, the Atomic Industrial Forum estimated there will be a 2,000-ton shortage in 1988—I am sorry—1985. Do you dispute this, or do you agree?

Mrs. Davis. We have been using our own numbers, and we would prefer to base our estimates on that, since we know their credibility.

Mr. Ward. There is another issue of there being a huge discrepancy between the need and the amount that is contracted for. Approximately only one-third of the amount that will be needed is under contract. Is there an area within your office that is concerned about this? Is this under your jurisdiction?

Mrs. Davis. It is, although we look at it from the view of providing uranium enrichment service, it is a concern of the Assistant Secretary for Nuclear Energy.

Mr. Ward. Assistant Secretary for Nuclear Energy?

Mrs. Davis. Dr. Cunningham, by name, and it is an industry assessment.

Mr. Ward. Have you made any contacts with him? Have you correlated all your figures?

Mrs. Davis. We maintain a very close correlation and also testify back to back.

Mr. Ward. So you are confident—this is my word, not yours, so if you disagree with it say so—that the capacity is there to supply domestic needs and those needs will be supplied from domestic resources?

Mrs. Davis. Let me say, we are not, and I am not, addressing the questions of the availability of nuclear reactors; that is the responsibility of the Assistant Secretary for Nuclear Energy. We do not make projections on the nuclear reactor requirements other than related to uranium enrichment services.

So, when you ask, are we confident about the relevance or the correlation between the amount of uranium being mined and the reactor activity in the country, we are not responding to that.

Mr. Ward. Let me cut the question down: You were confident that the resource is sufficient to meet demand, but whether it will or not is not a matter within your jurisdiction; is that right?

Mrs. Davis. We operate production facilities for uranium enrichment, and it is against that production that we will make our estimates. Reactor availability is really the responsibility, in terms of policy, of the Assistant Secretary for Nuclear Energy.

Mr. Ward. But the production facility, the enrichment facility, is unrelated to domestic production because you do process foreign fuel, so where are you relating the two? I don't understand. It was my understanding these were two separate programs until they were suddenly thrown together under a single budget item.

Mrs. Davis. We provide the data through our uranium resource assessment program that allows the responsible official, namely, in this case Dr. Cunningham, to match that against what he sees as the nuclear reactor demands and the nuclear reactor policies of the United States.

We provide, primarily, the resource data and he uses that data to determine whether or not light water reactors, as opposed to other types of reactors, should be the objective and in what percentage should be the planned nuclear reactor force in the United States.

Mr. Ward. At the Uranium Institute's meeting in London, David Robertson of Toronto asserted some Federal methods for calculating uranium resources are "assessment, at worst misleading and at the best useless." Would you care to respond to that?

Mrs. Davis. No; we would not.

Mr. Ward. You admit there are many such comments as that?

Mrs. Davis. There are many comments. They run the entire spectrum.

I would point out the CONAES report has a high regard for the Department of Energy resource data. We would not care to reply to an individual's allegations.

Mr. Ward. You further say, if I want to know if domestic resources in production are sufficient to meet domestic needs, I should go to the Assistant Secretary for Nuclear Energy?

Mrs. Davis. Yes, because we are aiming primarily at production facility data and your question is more related to what I believe is a nuclear reactor policy statement.

Mr. Dingell. The Chair recognizes counsel for more questions.

Mr. Bienstock. Earlier you mentioned the gas centrifuge facility which you anticipated will have its first module on line by 1988; is that correct?

Mrs. Davis. That is right.

Mr. Bienstock. You indicated that it would only use 5 percent of the energy currently used by the diffusion method?

Mrs. Davis. I said a gas centrifuge plant with the same output uses only 5 percent of the energy of a gaseous diffusion plant. The latter is the type we have now.

Mr. Bienstock. And that type of advanced technology is still being pursued according to the plan that was prepared last year?

Mrs. Davis. Yes, the schedule has the first module going on line in 1988, and the full plant online by 1993. We are keeping to that schedule.

Mr. Bienstock. I was confused. In the budget book it says, "For budget planning purposes, full production of 8.8 million SWU's per year is planned for fiscal year 1993."

I want to make sure it is being planned and that that is your intent, and that is not just something for paper discussion.

Mrs. Davis. No; it is planned and, furthermore, our 5-year budget submission reflects that date for the 8.8 million SWU production capacity.

Mr. Bienstock. Thank you, Mr. Chairman.

Mr. Dingell. Mr. Ward?

Mr. Ward. Given the magnitude of the error in your estimate of your profit for fiscal year 1980, if there is an increasing estimate of how much your loss is going to be as the year progresses, could you keep us informed of any significant changes?

Mrs. Davis. We would be glad to, and would want to.

Mr. Ward. I was somewhat surprised to see there has been such a switch from your estimated profit for fiscal year 1980 to such deficit, so I would appreciate being kept informed of that.

That is all, Mr. Chairman.

Mr. Dingell. Madam Secretary, the Chair thanks you for your testimony to us today. We hope that the concerns that have been expressed to you will invigorate the Department to correct the handling of these strategic petroleum reserves which are the source of continuing distress to this committee and the source of continuing jeopardy to the Nation.

We certainly wish you well in your labor in trying to correct this. We assure you, however, we will continue to superintend these matters vigorously. Whoever appears here for the Department in connection with these matters will receive vigorous questioning until these matters are going forward in the fashion required.

In any event, we thank you for your patience and we appreciate the help of you and your associates in this hearing.

The committee will recess until 2 p.m. this afternoon.

[Whereupon, at 12:40 p.m., the subcommittee recessed, to reconvene at 2 p.m. the same day.]

AFTER RECESS

[The subcommittee reconvened at 2 p.m., Hon. Phil Gramm, presiding; Hon. John D. Dingell, chairman.]

Mr. GRAMM. We begin this afternoon the second half of our hearings on DOE's authorization of the budget for fiscal year 1981. Our chairman has a statement that he would have made had he been here and not been detained. I would like to simply ask unanimous consent that his statement be put in the record and I would like to welcome Charles Curtis.

[Mr. Dingell's prepared statement follows:]

STATEMENT OF HON. JOHN D. DINGELL

Today's hearing is a continuation of the subcommittee's authorization hearings on the Department of Energy's proposed budget for fiscal year 1981. This afternoon we will receive testimony with respect to the proposed budget for the Federal Energy Regulatory Commission.

The Congress, in creating the Department of Energy, specifically established the Federal Energy Regulatory Commission as an independent body. Accordingly, it is especially important that the Commission receive the resources required to allow it to operate effectively and independently. The need to insure that the Commission discharges its statutory obligations to protect the American public effectively and in a timely manner is all the more urgent in this time of uncertainty as to future resources of energy.

We have as our witness this afternoon a personal friend and a good friend of the subcommittee, Chairman Charles B. Curtis. We welcome you here.

Mr. GRAMM. I would like to say, Mr. Curtis, I have long been an admirer of yours. I have long been an admirer of your outspoken defense of allowing markets to work where they can work and recognizing we ought not fix the things that aren't broken. I lock forward to hearing your testimony on behalf of DOE's 1981 fiscal year budget.

STATEMENT OF CHARLES B. CURTIS, CHAIRMAN, FEDERAL ENERGY REGULATORY COMMISSION, DEPARTMENT OF ENERGY, ACCOMPANIED BY WILLIAM McDONALD, EXECUTIVE DIRECTOR

Mr. CURTIS. I have a formal statement that I would like to submit to the committee for its consideration, and I would, with the committee's indulgence, like to read portions of it, but not the statement.

Mr. GRAMM. Without objection, we will put the whole statement in the record. [See p. 434.]

Mr. CURTIS. In 1978 and 1979 the Congress, guided by the recommendations of this subcommittee, invested additional resources in the work of the Federal Energy Regulatory Commission. This investment recognized the considerable problems which confronted this agency, including the difficulties presented by our being heir to a staggering backlog of undecided cases from the Federal Power Commission and a regulatory process that was badly in need of repair.

I am here today to provide you with an overview of the Commission's significant accomplishments, and an account of our continuing programs aimed at regulatory reform. My objective is to show you that the investment of public funds was well made and that the work of the Commission deserves your continued support.

The challenges facing the Commission reflect both the recent substantive changes in the FERC's statutory mandate, and the domestic and foreign conditions affecting our overall national energy economy.

Changes in our statutory mandate bear on the regulatory situation in both direct and indirect ways. The recently enacted congressional and Presidential initiatives assigned a significant number of direct chores to be carried out by rules of general applicability. The need for comprehensive energy policies and planning is well recognized, and is enforced through the Natural Gas Policy Act and the Public Utility Regulatory Policies Act.

The indirect impact has been to increase the pressure on those aspects of the regulatory process which related to the development of new energy resources. As you know, many portions of the National Energy Act provide incentives for additional energy production, and in the case of a regulated industry, this new production tends to increase our workload in connection with the certification and licensing of new facilities. Moreover, the impact of an unrelenting period of inflation falls directly and mainly on the ratemaking process. In today's economic circumstances providing for new energy facilities and making adjustment to inflation inevitably results in applications for increased rates. All of this is occurring at the same time that the administrative, the environmental, and especially the economic aspects of both electric and natural gas rate cases are becoming increasingly complicated.

I would emphasize, then, that regulation is proceeding today in a context of rising, not diminishing, workloads in the areas of energy planning and rulemaking, certification and licensing, and ratemaking. Our fiscal 1981 budget and manpower requests should be assessed in this light.

In this light, I ask your committee's consideration that our requested dollar amount of $80.87 million represents only an 11.5-percent increase over our 1980 level when that 1980 level is adjusted for the October 1979 pay increase and a pending supplemental which relates primarily to court reporting and print shop expenses. This 11.5-percent proposed increase is well below the current annual inflation rate. Moreover, we ask for no additional people. We will rely instead on productivity gains and reform of regulatory programs to free up resources to meet our expanding workload.

I will not take the committee's time in my oral remarks to review the various initiatives of the Commission to reform our processes. These reforms are set out in my formal statement and in the appended report which was submitted to the Congress pursuant to section 207 of the Public Utility Regulatory Policies Act, as well as in a series of letters to the President and to the Executive Director of the Regulatory Council accounting for the initiatives that the Commission has taken to remove unnecessary and burdensome processes, and to make our processes more responsive to the dynamics of today's energy market.

With that, Mr. Chairman, I would simply cease and desist to allow the committee to explore whatever questions they may wish to ask concerning the budget.

[Testimony resumes on p. 444.]

[Mr. Curtis' prepared statement follows:]

TESTIMONY OF

CHAIRMAN CHARLES B. CURTIS

FEDERAL ENERGY REGULATORY COMMISSION

In 1978 and 1979, the Congress, guided by the recommendations of this Subcommittee, invested additional resources in the work of the Federal Energy Regulatory Commission. This investment recognized the considerable problems which confronted this agency and the difficulties presented in our being heir to a staggering backlog of undecided cases from the Federal Power Commission and a regulatory process that was badly in need of repair. I am here today to provide you with an overview of the Commission's more significant accomplishments, and an account of our continuing programs aimed at regulatory reform. My objective is to show you that the investment of public funds was well made and that the work of the Commission deserves your continued support.

I. The Regulatory Context Today

The challenges facing the Commission reflect both the recent substantive changes in the FERC's statutory mandate, and the domestic and foreign conditions affecting our overall national energy economy.

Changes in our statutory mandate bear on the regulatory situation in both direct and indirect ways.

The direct impact of recent Congressional initiatives has been to heighten the importance of comprehensive energy policy planning. In the Commission's regulatory processes, this importance is demonstrated by the high priority we attach to generic rulemaking proceedings.

The indirect impact has been to increase the pressure on those aspects of the regulatory process which relate to the development of new energy resources. As you know, many portions of the National Energy Act provide incentives for additional energy production, and in the case of a regulated industry, this new production tends to increase our workload in connection with the certification and licensing of new facilities.

The impact of continuing inflation falls mainly on the ratemaking process. New energy facilities must continue to come on line, even at a rate which energy conservation measures reduce to a level below that of earlier decades, and the energy industries will continue to face the problem of rising construction and operating costs. The marginal costs of new capacity virtually always exceed the average costs of operating an existing utility system or natural gas supply network. Inevitably, filings for rate adjustments come to the Commission.

All of this, incidentally, is occurring at the same time that the administrative, the environmental, and especially the economic aspects of both electric and natural gas rate cases are becoming increasingly complicated.

I would emphasize, then, that regulation is proceeding today in a context of rising, not diminishing, workloads in the areas of energy planning and rulemaking, certification and licensing, and ratemaking. Our fiscal 1981 budget and manpower requests should be assessed in this light -- and, indeed, in light of our own internal efforts to squeeze every last increment of productivity out of our resources through improved management. Our $80.874 million request represents only an 11.5% increase over the fiscal 1980 level, as adjusted to include supplemental appropriation requests. This figure is below the current annual inflation rate. In real terms it represents not merely a level budget, but actually a tightening of the belt. We ask for no additional people, relying on productivity gains and reform of regulatory programs to free up resources to meet our expanding workload.

II. Reducing the Casework Backlog

Let me, therefore, begin my report with an account of our improved management procedures.

Shortly after the FERC was created by the Department of Energy Organization Act on October 1, 1977, we initiated the series of management studies that produced the data to create and implement the Commission's comprehensive Management Information System. Using this system, we monitor the progress of every item of the Commission's docketed workload from initial receipt to final completion. In monthly management meetings, the senior staff reviews the status of all workload categories, isolating those issues of regulatory policy which merit priority attention. Thus, we are now able to identify where additional resources are needed and how they may be more efficiently allocated. The new management procedures have begun to pay off in two specific ways: they have enabled us to identify and expedite projects with the greatest impact on the supply of energy, and they have permitted us to make inroads on the serious problem of casework backlog.

Taking advantage of the growing base of management information data, the Commission now issues a monthly status report on nearly 100 critical cases. Such cases either significantly affect future energy supplies (for example, cases involving license applications for large hydroelectric projects), or have significant policy implications (for example, the power pooling plans being developed under the Public Utility Regulatory Policies Act). The speed with which we can now move critical cases to completion has been made possible in large part by the institution of a "project manager" concept, under which a staff member monitors the progress of a case, and resolves delays as quickly as possible.

I am also pleased to report that, for the first time since the FERC was created, completions of cases have actually begun to outstrip new filings.

Completions rose from almost 23,000 in 1977 to 26,000 in 1978, and to more than 38,000 in 1979 -- more than a 60% increase in output during a period when our staff grew by only 27%. As I have already noted, receipts also started to increase during this period, but not at the same rate as our productivity. As a consequence, "regulatory backlog" at the FERC is diminishing -- at an average rate of at least 8% per year -- rather than growing.

Because we have turned the corner on our most critical problem, that of backlog reduction, it should in due course be possible to start reducing overall staff levels, and to do so while maintaining the rise in productivity that occurred during the past year. For the present, I believe that we must maintain the current personnel ceiling in order to deal in a timely manner with the surge of work created by the National Energy Act.

I stress our very real need for the full requested $80.874 million for Fiscal Year 1981. Our ability to meet in an effective fashion the special challenges of the regulatory context today depends on this commitment of resources.

III. Implementing the NEA

Let me next describe the modernized procedures through which we are determined to achieve regulatory reform. Real reform is an absolute necessity if the FERC is to be able to follow through on the mandates of the National Energy Act.

We are reconsidering the role of case-by-case determinations, inasmuch as the circumstances of today seem so obviously to require a more systematic, prospective, policy-oriented approach. I do not undervalue legal craftsmanship. I do not undervalue the confidence that scrupulous observance of settled practices can inspire in those who are subject to administrative determination.

However, true regulatory reform must start with a healthy awareness that our mission is not to observe historical formalities for their own sakes, but to improve conditions in the nation's energy economy. And, consistent with the rulemaking requirements of recent legislation in the energy field, our new orientation stresses policy formulation rather than litigation.

Both the Public Utility Regulatory Policies Act and the Natural Gas Policy Act require that the Commission promulgate new rules, many of them with statutory deadlines for completion. And effective and full implementation of these Acts must be accomplished without neglecting our continuing responsibilities under earlier statutes, principally the Natural Gas Act, the Federal Power Act, the Interstate Commerce Act, and the Department of Energy Organization Act.

Progress Under PURPA: Electric Power Regulation

Some of the efforts mandated by Congress in the area of electric power regulation under PURPA (for example, those on formats for cost-of-service data) have already been completed. Others are on schedule. Wherever slippage has occurred, we are either nearly caught up with our timetable (as we are with power pooling studies), or else are rapidly accelerating our efforts in order to regain lost time (as in the cogeneration area). Many of the tasks assigned to us require us to supplement the efforts of permanent staff with contractual support.

More generally, the actions under PURPA pertain to the hydropower budget category, and the multi-resource category, which includes electric power regulation. Approximately

$30.25 million of our total budget request is for the combined programs of hydropower and multi-resource, roughly 45% to the former and 55% to the latter.

Corresponding to this dollar figure is an allocation of 696 positions to all phases of hydropower and electric regulation. (The numbers include a prorationing of personnel who fill legal and administrative positions in support of the hydropower and electric regulation effort.) This allotment should permit us to deal with the current workload level, and to respond to the additional burdens that we anticipate in the electric power field -- burdens that will, in a sense, demonstrate the success, rather than the failure, of the various National Energy Act provisions.

We are already experiencing instances of the indirect impact of Congress' recent initiatives on the regulatory caseload. Congress, in PURPA, created incentives for industry to explore opportunities for additional hydro-electric development, both in the form of increments to existing capacity and in the form of new low- and medium-head projects. Responding to these incentives, electric power companies have begun to file preliminary or exploratory applications for new and for adjusted hydro-electric licenses. It is a case of effective legislation, encouraging an increase in the supply of clean, reasonably priced power. But part of the cost of the successful incentive program is a stepped-up flow of work through our offices.

Natural Gas Regulation: Progress Under NGPA

The increase in hydroelectric activity, while impressive, is only an indication of the far more significant increase that we expect in the fields of natural gas certification as deregulation proceeds, and as incentive pricing calls forth higher levels of activity by both the producers of gas and the operators -- and builders -- pipelines. Deregulation will eventually result in the elimination of a significant portion of our traditional workload, but not before the very success of the Natural Gas Policy Act of 1978 produces a period of accelerated activity required of the FERC.

We met the first set of NGPA deadlines with the establishment, on an interim basis, of new gas pricing categories. We have now substantially completed the final pricing regulations, and are continuing our work on other crucial sections of the NGPA: the gas curtailment provisions and the incremental pricing provisions.

Central to our actions under NGPA has been a determination to ease the strain on the regulated industry -- which, along with the Commission, must make a difficult transition to a revised statutory framework.

Indeed, the provision of a better environment for industry must be considered as an important goal of regulatory reform. To this end, each Commission has participated in a series of seminars on NGPA requirements with industry leaders around the country. Responding to expressions of uncertainty regarding the Act's complexities, we installed a telephone "hot line," so that ambiguities in NGPA implementation provisions could be quickly cleared up by direct contact with our staff.

We take some satisfaction in knowing that our efforts under the NGPA have generally been given high marks by those who are subject to and participate in our processes. The NGPA continues to be controversial but much of the passionate bitterness which attended its enactment has been dissipated in its administration. Of course, more remains to be done before success can be claimed for this program. Continued dedicated effort will be required.

Overall, this effort -- natural gas regulation, including actions to implement NGPA -- accounts for $44.46 million of our total budget request, roughly divided 45% to producer regulation, and 55% to pipeline regulation. An allocation of 995 positions corresponds to these dollar figures. These positions are involved with all phases of gas regulation, and include prorated numbers of personnel who work with, but not in, the Office of Pipeline and Producer Regulation, such as legal and administrative support personnel.

IV. Continuing Regulatory Reform

Our efforts to deal with the substantive issues of the National Energy Act rulemakings have proceeded in tandem with continuing efforts to steamline the regulatory process.

The regulatory mechanism that the FERC inherited from the FPC was badly in need of restructuring. The Commissioners who formed the first full complement of appointees to the

FERC often felt swamped with masses of substantially similar decision items. Our agenda items ranged from cases with broad national policy implications to issues arising from highly individual circumstances.

Delegations of Authority

In addition to expanding the use of a consent agenda, permitting us to complete many routine matters without time-consuming discussion, we have instituted two major Delegations of Authority.

In the first phase, we shifted decisionmaking responsibility for more than 7,500 separate items from the Commission to senior staff levels. In the second phase, authority to act upon several thousand additional items was delegated to Office Directors. As a result of these delegations, an estimated 62% of hydroelectric actions and 56% of all electric rate decisions can now be resolved at the staff level.

V. Summary: The New Orientation

The management reforms instituted during the first two years of the existence of the FERC form a consistent pattern, one aimed both at upgrading efficiency within the staff and at achieving an environment in which the Commissioners' efforts can be concentrated on the more critical and far-reaching issues of regulatory policy.

The Commission is now undergoing rapid change -- progressive change, I think -- as we adapt to altered requirements in today's economic and regulatory context. I have tried to give you a view of these fundamental changes, to show how we are responding -- by management initiatives that are meant to let us function within an essentially level budget, and by efforts designated to improve regulation patterns.

My main message has been that we are on target as we respond to the requirements of the National Energy Act, and on target in our efforts to improve the basic nature of the regulatory process. We are achieving major agency priorities, especially that of reducing the casework backlog; and we are moving toward an organizational format which emphasizes systematic policy orientation rather than case-by-case litigation.

To report that we are on target, though, is to emphasize that we have not yet reached our goal. The effort to make regulation more effective and at the same time less burdensome continues. We think that the FERC is making a meaningful contribution to that effort, and, as a result, we feel justified in asking you to continue the kind of support that will enable us to keep moving in the same direction.

Mr. Gramm. The Chair recognizes the gentleman from Michigan.

Mr. Dingell. Mr. Chairman, I thank you, and I thank you for the able way you are presiding here. I want to say I am particularly delighted to see my old friend, Mr. Curtis, back here. We on this subcommittee have a friendship with him going back many years. We are most proud of the job he is doing down there in the agency.

I also note with pleasure that you have with you four very dear friends, much respected former staff members either of this committee or members of this committee, Mr. Ain, Mr. Levine, Mr. Schroeder, and Mr. Nordhaus. It is a particular pleasure to see you back here. Life does not allow us the privilege of seeing our friends as often as we would like and I want to tell you I am surely delighted to see you all and I am proud of the fine job of serving the public interest that is being done by all of you and the fine leadership of Mr. Curtis.

Mr. Curtis. Thank you, Chairman Dingell. I appreciate those remarks very much. As you know, we have drunk deeply from the well of the resources of this committee.

Mr. **Dingell.** We have been hard put to keep ahead of your needs, but I do want you to know we have contrived to maintain what I regard as a staff adequate in numbers and superb in competence in spite of your best efforts, so we are delighted to see you here and we are pleased we can tell you we are surviving in spite of what you have been trying to do to us.

Mr. **Gramm.** The Chair thanks the gentleman from Michigan. I do not know if the well of resources is like the Pierian spring, but in any case it must go deep. I would like to ask one question and then turn it over to staff.

I would like to ask, Mr. Curtis, do you think that there is any support within the Federal Energy Regulatory Commission for a final step toward the deregulation of natural gas prices? We are moving to a process where the adjusted price structure is more competitive. It has had a favorable impact on exploration and interstate sales but in the process it burdened down the industry with paperwork.

It set out a rate structure which is a haven for lawyers and accountants and which has imposed a heavy cost on industry and in turn on the consumer and the American people.

Mr. **Curtis.** The policy expressed in the Natural Gas Policy Act I regard as a policy to permit market forces to determine the commodity value of natural gas in the field, but that policy also says that the markets were so imbalanced by the presence of a regulatory system exercised for a period of some 20 years—sometime exercised in clumsy fashion—that a transitional period was required for the adjustment.

I think that is a sound policy choice that the Congress made. Transitional mechanisms by their very nature bring forth change of substantial measure. That is especially true in this marketplace. Change is difficult. I has its price. In this case the price is a regulatory system that during the transitional period will create cost in form of paperwork and regulatory control of market forces. Nonetheless, I think if that regulatory force is exercised intelligently, or at least as intelligently as we can draft it, the Natural Gas Policy Act can be made to work as it applies to producers and as it applies to dealing with the evils and problems that were present in the marketplace under the regimen of the Natural Gas Act.

I think we have some information that shows on a trend basis indications of the success in the Natural Gas Policy Act. For example, it has done away with the dual market. It has freed up interstate pipelines so that they have been able to acquire an additional 5.6 percent of supplies over the previous years. Interstate systems have been able to obtain additional gas.

Also, we do know that the number of operating rigs in the field is today at an all-time high. We do know on an average, compared to 1978, it is still off some 3.2 percent. But the current number of rigs in the field is up almost 13 percent over last year. There are various explanations for what occurred in the first two quarters of 1979. One is weather. The other is uncertainty—uncertainty in putting in place what is new, what is different. We have tried to minimize the uncertainty, but I think some of it was simply unavoidable. But nonetheless, the figures we are looking at now are promising. Natural gas completions are up 11 to 12 percent over

1978. I think that speaks positively in terms of the industry's response to the regulatory pattern of the Natural Gas Policy Act.

Now, in good conscience I must tell the committee there are still problems. There are problems both with our implementing regulations which we have yet to fully work out, and there are problems inherent in the statutory scheme.

Mr. GRAMM. Let me stop you there and recess our hearings so that I might run over and vote. I will be back as quickly as I can.

[Brief recess.]

Mr. GRAMM. Chairman Curtis, I would like to ask a second question before recognizing my colleague from Indiana. Let me see if I have the correct reading of the statement you made in your prepared statement.

In essence, what you said is, as we move toward deregulation, and we are in some intermediate stage, we should not believe that deregulation should generate a corresponding reduction in regulatory cost but that in fact the process of initiating deregulation in itself might produce larger cost in that transition period.

Mr. CURTIS. Yes.

Mr. GRAMM. Let me ask one final question and it has to do with the potential for deregulating gasoline at the retail level. I would like to first ask you what your feelings are on this subject. Do you favor deregulating gasoline at the retail level?

Mr. CURTIS. The Commission considered at one time an energy action proposal of the Secretary which would have deregulated motor gasoline. The Commission by unanimous vote agreed to that proposal. The proposal was not submitted to the Congress, as it turned out. We agreed to that proposal on the basis of an evaluation of the analysis that was prepared at the time. I am not current on those analytical elements, and we do not have direct regulatory responsibility in this area. So, I really do not believe I have a proper basis upon which to express a judgment. As a general proposition, however, I would believe that it is important to evaluate the ability of the market to work. If the market can work, then governmental controls should be removed. The analysis that we looked at showed or suggested, depending on how reliable you think such things are, that the market could in fact work and would produce a superior result.

Mr. GRAMM. The Chair recognizes the gentleman from Indiana.

Mr. SHARP. Thank you, Mr. Chairman.

I am sorry I had to miss the testimony. Let me ask you this. The FERC required a study on pancaking and the backlog at the agency. I know you submitted a report as of January 24. Could you give us a quick rundown as to what it is that you are recommending, both in terms of your own changes, and are those proceedings the ones you have authority to exercise yourself and, second, what is it we should do in Congress?

Mr. CURTIS. Yes. The report submitted to the Congress under section 207 attempted to review both the historical growth of the antecedents to the Commission's problems, as well as the current situation. The report also seeks to determine what administrative latitude we had to deal with the problems.

It is my judgment that by administrative actions alone we can reduce the time required to process electric rate cases from what is today a 2- to 4-year period, and sometimes longer, to a 12-month period.

Now, there are some important preconditions in the report which I will not bother to repeat now. Essentially we can do much administratively to alleviate the problems identified by the Congress in section 207. However, we cannot solve those problems.

In other words, rates will continue to take effect before they are declared to be just and reasonable by the Commission. Pancaked rates can occur due to a series of successive rate increases taking effect because the Commission's determination process is incapable of catching up with the situation. Additionally, price squeeze, which is a price discrimination resulting in an anticompetitive effect, cannot be precluded by the Commission, in light of the dual regulatory system existing between States, who have responsibility to regulate rates at retail levels, and the Federal Government, which has responsibility to regulate most wholesale rates.

If the Congress wishes to address that problem to achieve a solution, it will have to change the statutory scheme. I believe that the Congress should consider changing the statutory scheme in two respects.

One, it should reexamine the jurisdictional assignment in the first place. As I tried to indicate in the report, there are an array of arguments on both sides of this question, but fundamentally it is not clear to me that there is a signifcant Federal interest involved in the vast majority of our electric rate cases that either necessitates or even suggests the advisibility of Federal controls of those rates. I think the Congress should evaluate that question from the standpoint of its purposes, which were purposes never really spoken to by the Congress but which were found by the Court principally in the *Colton* decision handed down in the mid-1960's.

Second, I believe the Congress should reexamine the statutory scheme. In the best of all worlds. I believe should Congress determine to continue to reside this jurisdiction at the Federal level, a different mechanism would be required to truly and effectively address these problems. The different mechanism should, in my opinion, invest the Commission with the authority to permit interim rate relief to occur during the pendency of a proceeding. In other words, the Commission should have the authority to permit interim rates while the Commission deliberates on the entirety of the applied-for rate increase. As I tried to articulate in the report, the problem with simply precluding rate relief until such time as the Commission is able to conclude its processes is that the balance will swing too strongly in favor of the short-term consumer interest in low rates and against the longer term consumer and national interest in adequacy and reliability of service.

There is a little question that in an age of unrelenting inflation, rate relief is required. There is little question that all the ingredients of electric rate cases—marginal cost, the fuel cost, the labor, and materials cost of new facilities, the replacement of old debt with new debt at what were unbelievable rates just 5 years ago—all leave rates upward and are going to result in justifiable need for additional revenues. If you simply defer those rate increases until such time as the administrative process can be concluded, I believe you can and will seriously damage the electrical capacity of this country. So you need interim rates.

With all respect to the committee and to this Congress, I find it difficult to believe that the Commission will successfully obtain the authority to impose interim rates by its own procedural standards and criteria, which will be broad discretionary measures. If you do not grant us this authority, we will simply compound all of our rate cases by a factor of two. This is a highly litigious field. Rate cases at the Federal level are contests between suppliers of electricity and their competitors in many cases. It is a contest of enjoining the philosophical differences of public power and investor-owned power. These cases are bitterly fought. The dollars involved will justify the litigation cost and the interim rate will be as strongly contested as will the final rate. So, all of these factors led me to recommend only to the Congress that it wishes to solve the problem, it is going to have to change the statutory scheme, and it should consider a scheme that provides for interim rate relief while deferring a final rate until final agency decision.

That scheme will solve some of the problem. It will not solve price squeeze, but I would suggest to you that the form and substance of that solution is better developed in the crucible of the Congress and the legislative process—because it will involve compromise—than it could be within the scope of the study I was asked to perform for the Congress.

Mr. SHARP. Where does the Commission stand in terms of its backlog today of electric rate cases?

Mr. CURTIS. We have 248 pending full requirements or partial requirements electric cases, which are what are generally referred to as electric rate cases. There are other items but that is generally where we are.

Mr. SHARP. How does that compare with 2 or 3 years ago?

Mr. CURTIS. Last year we had 271, something like that. The difficulty is, and numbers are deceiving here because since the *Conway* decision—I may have misspoke myself—I meant before on the jurisdictional side to refer to the *Colton* decision, but since the *Conway* decision, which said the Commission must entertain and consider issues concerning the relationship of retail rates to wholesale rates and whether price discriminations result in an anticompetitive effect, there has been an added area of complexity to our cases that has made them incredibly more difficult that they were. Therefore, it is going to be a long time before the Commission is going to whittle that load of undecided cases down to manageable proportion. We do have two proposed rulemakings, one on substantive matters, one on procedural matters, dealing with price squeeze issues which we believe and hope will simplify those cases and permit us to more effectively deal with this question. But that is sometime off, I have to tell this subcommittee.

Mr. SHARP. As you know, there is a great deal of concern about regulatory reform in and out of Congress, and your people have been struggling to catch up—ever since you took office—with what has been hanging around, as I understand it, for several years.

What if we change some of the basic requirements that are proposed in amendments now before a number of committees, to require additional considerations of economic impact, impact on small business, impact on this and that? What kind of impact does that have, the requirement of some of the regulatory reform proposals, on your ability to get rid of this backlog or to give the various parties involved a reasonable decision in a timely manner?

Mr. CURTIS. Mr. Sharp, regulatory reform is something I know this committee is interested in. It is something I am very interested in. I think it is fair to say that the processes of government collectively are not working well in the public's interest, that government needs to redefine itself in that which it attempts to do, that which it can do and that which it has the fiscal means to accomplish. But in my opinion the experience of the last 2½ years teaches me that is a labor that must be tailored to the specific circumstances of each governmental program. As witnessed by the 207 report, we have been talking about statutory missions that are different. Agencies, in terms of the tools that Congress has equipped them with to deal with the problems, have different capabilities to respond to the dynamics of today's marketplace.

We administer acts which were written in the 1920's and the 1930's against circumstances that are so different from today. There is no substitute for simple hard work in untangling both the administrative problems and the statutory difficulties as they relate to specific industries or sectors of the economy.

It is my opinion that one of the reasons that we as a government are in the difficulty with which we find ourselves is that he have attempted general legislative solutions to dictate accomplishment of the public interest by simply directing that it be done without assessing the realistic opportunities of achieving the goal set forth in the statutes. I think that is going to prove to be as true of the regulatory reform effort as it has been true of the statutory task which we are now seeking to reform.

My difficulty with regulatory reform intiatives is that government has become as complex as our economy, and our society. We simply cannot measure the impacts, the consequences of these types of general across-the-board reforms. I am sure, Congressman Gramm, that you and I can agree as to that a particular rule, a regulatory action is deserving of a cost-benefit analysis and a consideration of the alternatives including a small business analysis or competitive impact analysis or a governmental impact analysis or a governmental impact analysis, What we cannot agree upon is a definition that will catch only those rules and not others.

For example, the current regulatory reform measures at their very bare minimum will require these types of analyses for something defined as a major rule. The major rule definition would sweep up 200 pipeline cases in our agency, 171 electric rate cases and some 40 to 50 other agency actions. The cost of doing those analyses is further delay in the decisional process. I, as an administrator of statutes, am perfectly willing to do the analyses so long as Congress consciously incurs those costs. I am afraid you cannot see the cost by general across-the-board reform efforts.

Mr. SHARP. I have another set of off-the-wall questions. You maintain a public document room in the commission where I guess various interested parties may come and get information. I have heard complaints about that operation. One can be a long, long wait and not necessarily get a clear response.

I do not have the evidence to provide you, but I wondered what kind of steps, if any, are being taken there and what does that do to you in terms of personnel requirements to be able to provide that?

Mr. CURTIS. There are two requirements for solving that problem. First, let me state it is a real problem, It is one that we are painfully aware of, not only a problem for the public, but for the offices of the Commission.

Mr. SHARP. Offices of the Commission are having difficulty getting information?

Mr. CURTIS. We have a problem getting information from its own files. Essentially it is one of our bitter legacies. The central files system is in fairly chaotic order. We have in this budget, I believe, a $1.5 million minority contract to microfiche and organize our central file system, which will not only improve its accessibility to the public, but also will expedite our consideration of Freedom of Information Act requests and permit the Commission, in essence, to do its own job. It is a very serious problem though. What we are doing essentially is proposing the classic governmental repsonse. We are proposing to spend money to solve this problem but frankly I see no other way to get at it.

The second thing is, we simply have to do something about the grade levels of the people who perform these functions. Many of these grades are classified GS-1 and GS-2, and you simply cannot hire anybody to perform those functions of the caliber and competency level that you need. We have been very fortunate to convince people who are already inflicted with that situation to stay.

We are trying to get those grade levels changed, but to get some new people in, in this age of inflation, is nearly impossible.

Mr. SHARP. Who makes the decisions on the grade levels?

Mr. CURTIS. It is a matter of our going to the OPM and convincing them of the need. They have been besieged with implementation of the reform Act and it is difficult. We have the same problem, I might mention, on electric rates specialists, where our grade classifications were made years ago when we had 12 pending cases.

Mr. SHARP. Chairman Curtis, could I ask that you provide for the record a letter stating these requests that you have made to the OPM and perhaps we will take it upon ourselves in the committee to try to follow up and see they can make some prompt decisions?

Mr. CURTIS. We would be happy to do that, I do not want to imply they have been blocking us. It is simply a matter of working together and getting this done.

Mr. SHARP. I will ask that the record be held open at this point for that information to be provided.

[The information requested was not available to the subcommittee at the time of printing.]

Mr. SHARP. We are having to vote again, as you can tell, so I am going to temporarily recess this and Mr. Gramm may be back before the vote is finished in order to proceed.

I want to thank you again for your efforts at the Commission to try to bring some order and some reason into a very difficult process that we in Congress do not mind making even more difficult from time to time. It has not been one of our greater achievements on Capitol Hill to bring order and discipline to the Government.

Hopefully, that is going to change because it is very clear the American people are not going to tolerate the U.S. Congress much longer either for that reason or even better reasons, and so I hope you will see some better performance on this and as well.

But thank you very much and we will recess for 5 minutes or so.

[Brief recess.]

Mr. GRAMM. Chairman Curtis, I would like to ask you one other question before turning it over to staff for a brief questioning period. I would like to ask you about incremental pricing of natural gas.

Mr. CURTIS. Chairman Gramm, let me try and give you a status report. As you know, title II of the Natural Gas Policy Act contemplates a two-phase rulemaking to put in place an incremental pricing mechanism so denominated in the act. I add that qualification because it is not incremental pricing as an economist would understand it, but it is a surrogate, if you will, for marginal cost pricing which the Congress devised in the Natural Gas Policy Act.

The first phase directs the Commission to impose this incremental pricing mechanism applicable to industrial boiler fuel facilities which take gas in excess of 300 MCF per day on average in a peak month of use.

The second phase of the rule directs the Commission to extend incremental pricing to other industrial users. We have issued a proposed rulemaking which would accomplish that. This rulemaking, unlike the first, is subject to congressional review and may take effect only if it is not vetoed by either House.

The proposed rulemaking would extend incremental pricing to all industrial users who use gas at that essential, at that 300 MCF level. The potential consequence is that those industrial users—and here we are talking primarily about process and feedstock users—could buy an allocation from the surcharge account, have their delivered prices taken to an alternative fuel cost, which the statute tells us is the No. 2 heating oil price in the region unless the Commission makes certain findings, in which case it has the latitude to lower that to the No. 6 oil price.

On the rulemaking we have concluded hearings. We have held a series of five regional hearings, the last of which was in Washington, D.C. That rulemaking, together with certain permanent exemptions from the phase I rule, are to be submitted to the Congress on no later than May 9 of this year.

We will make that submission date. I want to make it clear that what the Commission has done in the proposal stage is to propose a broad application on the incremental pricing mechanism in order to get an evaluative record regarding both the consequences and the alternatives that the Commission may have available in drafting a final rule to be submitted to the Congress for its consideration.

The Commission has attempted through this device to acquire information that is not otherwise available to it and which is not otherwise within the realm of its experience or even expertise. Essentially what we are talking about is the end-user market on the other side of the distribution companies, which is traditionally served by interstate pipelines, and which is traditionally within the realm of State regulatory commissions.

That is why I want to emphasize that this rulemaking was designed to sweep as much information before the Commission as possible in order to make the evaluative judgments the Congress seems to have required of us. I would suggest there is difference of agreement how much latitude the Commission has under the phase II rulemaking.

I think those who would recommend that the Commission not do anything find a great deal of discretion there. Those who believe that the Commission should broadly implement incremental pricing find very little discretion there. This is something that the Commission will have to address in the final rule.

Mr. Gramm. Does it bother you that we are, in incremental pricing, going to be imposing a system which, given end use demand for natural gas, effectively subsidizes the user of natural gas who, in terms of conservation gains in the last 5 years, has a poor record relative to an end user who by and large has a good record of conservation in energy use efficiency?

Mr. Curtis. I can only say that point of view has been very forcefully made in our record. The Commission will have to evaluate it, and I will analyze it in the course of our deliberative process. But I cannot truly speak to it in response to your question because of the pendency of the proceeding. I hope you understand that. I can only essentially report the status of the situation to you.

Mr. Gramm. Let me conclude before I recognize the gentleman from Texas, Mr. Collins, by saying that it is easy for me to understand the politics of incremental pricing. It seems to me it is very easy to make a value judgment as to the relative value of end users outside the marketplace.

But the problem with that, it seems to me, is that while it might promote some humanitarian goal, it might promote some social goal. The social value of the consumer in the home is to be given a higher weighting than the social value of the user in the marketplace who is using that to create jobs and expand economic growth.

But the problem as I see it in terms of implementation is that once you go on this social value judgment and you do not use markets to allocate resources, then you have no guidelines at all. That is simply a concern I have of the process.

With that comment, let me recognize the gentleman from Texas, Mr. Collins.

Mr. Collins. Thank you Mr. Chairman.

We appreciate having Chairman Curtis with us because he served on our committee so well and knows all of these problems. I think in many ways you are better informed about it than some members on our committee.

I am keenly concerned about this regulatory process. How long is it that you have been sitting as Chairman with the FERC now?

Mr. Curtis. Two and one-half years, Mr. Collins.

Mr. Collins. It seems like just yesterday. I remember when you started. It has been 2½ years you have been working with it. All these regulations that Congress has passed—to what extent are they beneficial to the country?

Mr. CURTIS. It is very hard to make that evaluative judgment across the board, Mr. Collins. I think there are clearly things which the Commission does that need not be done, that essentially the public interest would be better accomplished if we were to withdraw the regulatory presence. We have attempted in a number of areas to do just that.

As far as the basis——

Mr. COLLINS. May I interrupt? To what extent do we allow you the latitude to streamline or expedite regulatory procedures?

Mr. CURTIS. I think a lot of our problems are self-inflicted, Mr. Collins. I have always regarded it as the responsibility of administrative agencies to explore the full latitude of the generic statutes that they administer to correct problems before they go back to Congress and get a change in the generic law.

That is what we are doing. There may be instances in which we could be helped by changing the law itself. The Congress did that in its last legislative effort. Your colleague, Congressman Moorhead, introduced an amendment which would relieve from the licensing provisions so-called manmade conduit facilities. The Commission has implemented that direction, and we have exempted several pursuant to that authority, and I must tell you I believe all to the public benefit. There are a number of examples that we could list

I do think as a general matter, not only with our agency but with Government in its entirety, that we have been committed to do things which are beyond our means to accomplish. Even within those areas in which certain rules can be effected, through governmental direction, we do not have the fiscal resources to do all of these things. Finally, even in those areas where we can effect those requirements, sometimes the marketplace would do it much more efficiently.

What I really believe has to be done, not only in our agency but in every agency—and this is something I think the President is very forcefully committed to—to reexamine the presence of Government and to reform its processes. It is going to be a lot of hard work and it is going to take time, but it has to be done.

Mr. COLLINS. I notice in your budget this year you are requesting $76 million. I imagine most all of that goes for salaries, doesn't it?

Mr. CURTIS. Yes. Actually, I hope that an amendment has caught up with our budget. We are actually requesting now $80 some million.

Mr. COLLINS. $15 million more than last year?

Mr. CURTIS. It is $13.1 million more than last year, but if you take out of that the October, 1979 pay increase and if you take out of that a pending supplemental for court reporting and for printshop expenses, it actually is only a $8 million increase, which is 11.7 percent of the dollar amount.

Our budget is very heavily personnel intensive, and I would point out that increase is less than the rate of inflation. I would also point out that we have not asked for any additional positions.

Mr. COLLINS. People at home attribute inflation to excessive Government spending. In effect, the Federal Government runs the deficit. So when we talk about inflation up here, we have caused it. We see the raise due to inflation, but in addition to the inflation rate you are saying you need $8 million or $9 million or how much more in your department?

Mr. CURTIS. $8 million more.

Mr. COLLINS. Why is that, Mr. chairman?

Mr. CURTIS. Because our cost of doing business, like other peoples' cost of doing business, is going up. It costs more in postage. It costs more in court reporting. It costs more in printing, Xeroxing, and facilities. Our rent has gone up. All of this, I think, if we have done our job well, is substantiated in our budget.

Essentially our budget is an inflation-reflected budget and that alone. that is a generalization but basically that is our problem.

I think the Government spending contributes significantly to inflation. I accept that judgment, but I would assert in our particular area we can contribute much more to inflation through ineffective and clumsy regulatory efforts. We simply have to invest in the resources to do that which we have been assigned by the government. If we are not able to do that, then we should revise those tasks.

Mr. COLLINS. You have a big factor called administration of wellhead pricing in this year's budget. What does that accomplish and why is that needed?

Mr. CURTIS. From our standpoint, of course, we are administering an act, the Natural Gas Policy Act, which imposes these requirements. The regulatory method under the Natural Gas Policy Act is designed to accomplish a transition from the market that existed in 1978 to a deregulated market ultimately to permit market forces to determine the price in the field of natural gas on a commodity value basis.

But frankly that market was so out of order, so distorted by the practices and policies of the past—as I was saying in an earlier response—that it was Congress judgment to provide for a transitional mechanism. I guess, therefore, what that expense accomplishes is providing that transitional mechanism which, but for it, apparently this Congress was unwilling to either change the market circumstances or trends toward deregulation.

Mr. COLLINS. This is primarily an auditing group?

Mr. CURTIS. No, sir. The Natural Gas Policy Act—there are two functions in this group. The Natural Gas Policy Act sets up a rather complex mechanism for determining qualifications by well basis for different categories of gas, some 11 different price ceilings applicable in 33 potential categories.

Mr. COLLINS. This is the group that gives approval?

Mr. CURTIS. This group reviews State agency determinations and also audits to determine whether there is compliance through the system. What we do not want to do is repeat the mistakes that were the history of the Federal Energy Administration. What we do not want to do is get into a situation where 2 or 3 years from now we are reaching back for violations where the cumulative dollars of overcharges, if repaid then, could literally put a firm out of business.

Mr. COLLINS. How current are your rulings now?

Mr. CURTIS. In the case of well determinations we are absolutely current. That is as much because there is a statutory mechanism that cuts them off after 45 days or 120 days in some cases. So we cannot have a backlog.

Mr. COLLINS. 120 days is your outside limit?

Mr. CURTIS. Yes; we must review within 45 days. It becomes final unless we either remand it or give notice of reversal. If we do not act within a 120-day period it becomes final.

Mr. COLLINS. Thank you, Mr. Chairman.

Mr. GRAMM. Thank you, Mr. Collins.

Let me now yield to minority staff, if they have a question.

Mr. BIENSTOCK. Thank you, Mr. Chairman.

Mr. Curtis, at the end of January you had indicated that the incremental pricing proposal may not make the May 9 deadline. Could you elaborate on that, that you may not have implementation?

Mr. CURTIS. I do not recall so indicating. Can you refresh my recollection?

Mr. BIENSTOCK. There is a news letter from the American Public Gas Association that says:

> FERC Chairman Charles Curtis indicated last week—late January—there is a possibly that phase II of the incremental pricing proposal could be deferred or narrowly implemented until 1985.

Mr. CURTIS. I really do not know what that reference is. But let me say there are those who maintain that through a combination of the exemption authority, as well as a phased implementation approach, which although it would have to take effect within 90 days of clearing the review process, could call for phased implementation, through a combination of that and the exemptive mechanism, it is conceivable that the Commission could, with congressional approval, defer or stretch out implementation of phase II. But that will all be up to the Congress in essence in reviewing our proposal.

Mr. BIENSTOCK. In today's newspaper there was an article about the Alaskan natural gas pipeline, about potential Government ownership of that. Would you comment on your opinion on that?

Mr. CURTIS. I really cannot. I did read the article. It refers to a series of memoranda directed to the Secretary. I am not privy to those memorandums. I am as interested in it, as I am sure this subcommittee is.

Mr. BIENSTOCK. Thank you, Mr. Curtis. Thank you, Mr. Chairman.

Mr. GRAMM. The Chair now recognizes majority staff for the purpose of asking questions.

Mr. BRAUN. Chairman Curtis, would you please summarize the status of the Commission's current workload?

Mr. CURTIS. Yes, Mr. Braun. Let me give you a couple categories of figures. We measure our receipts—those are filings which call upon the Commission for various levels of decisions—against our completions and workload is the remainder.

Now, we have at the end of fiscal year 1979, we had 15,627 items in workload. Some of those are minor. Some of those are major. These things are not weighted. In 1980 we are looking toward an end-year workload of 13,575. At the end of fiscal year 1981 we are looking toward a workload of 8,874.

Now, I would point out that for the first time, at least since I have been at the Commission, and for the first time in a number of the years which preceded me, the Commission is completing more than it is receiving, and we are, therefore, able to cut into our workload. This is in spite of the very dramatic increase in receipts. receipts incidentally for the last 3 fiscal years have gone from 28,329 to 37,953 to 69,467 in fiscal year 1980. That trend will break off in fiscal year 1981.

Now, a lot of that growth is the result of review of well determinations. The numbers are very big. A lot of the increase in productivity is the result of knocking out producer rates and producer certificates. But even after you factor those out, I think our figures will show that we have made absolute, positive productivity gains with respect to the remainder of the Commission's jurisdictional items.

Mr. **Braun**. Have actual completions for each year increased?

Mr. **Curtis**. Some completions, yes.

Mr. **Braun**. What are your views——

Mr. **Curtis**. I can give you the numbers. I have them here, if that would be helpful.

Mr. **Braun**. Submit them for the record.

Mr. **Curtis**. I have a chart that sets all this out.

Mr. **Gramm**. If you will give us the chart, we will put it in the record.

[The chart referred to follows:]

ENCLOSURE 1

FEDERAL ENERGY REGULATORY COMMISSION
ANNUAL WORKLOAD HISTORY AND PROJECTIONS

AREA OF REGULATION	RECEIPTS				WORKLOAD				COMPLETIONS				PENDING AT END OF FY				
	FY78	79	80	81	78	79	80	81	78	79	80	81	77	78	79	80	81
HYDROPOWER	247	323	479	568	861	919	1053	1103	265	345	518	567	614	596	574	535	536
WATER RESOURCES ANALYSIS	11	18	26	22	53	62	75	70	9	13	27	27	43	44	49	48	43
ELECTRIC RATE	861	808	878	898	1343	1307	1315	1285	844	870	928	898	482	499	437	387	387
SECURITIES	67	78	86	104	77	88	103	116	67	71	91	104	10	10	17	12	12
GAS PRODUCER RATE	19938	7214	3585	3545	29021	17690	7244	5363	18545	14031	5426	4196	9083	10476	3659	1818	1169
GAS PRODUCER CERTIFICATE	2732	1692	1361	1285	5126	4630	3682	2302	1988	2309	2665	1557	2394	3138	2321	1017	745
OIL PIPELINE	2535	2004	2720	3168	2609	2143	2887	3334	2470	1976	2721	3189	74	139	167	166	145
GAS PIPELINE CERTIFICATE	854	938	939	968	1744	1635	1748	1585	1047	826	1131	1024	890	697	809	617	561
GAS PIPELINE RATE	959	1271	1605	1595	1380	1550	2047	1992	1101	1108	1650	1610	421	279	442	397	382
NGPA FILING	0	23477	57250	29100	0	23477	64080	37368	0	16647	55812	32763	0	0	6830	8268	4605
ENFORCEMENT ACTION	11	49	125	240	11	52	162	316	8	15	86	230	0	3	37	76	86
FINANCIAL AUDIT	74	89	88	98	153	195	201	183	47	82	116	98	79	106	113	85	85
RULEMAKING & OTHER JURISDICTION	40	192	325	298	106	270	497	447	28	98	348	329	66	78	172	149	118
TOTAL FILINGS	28329	37953	69467	41889	42484	54018	85094	55464	26419	38391	71519	46590	14155	16065	15627	13575	[illegible]

FY 1978 and 1979 are actual data. FY 1980 and 1981 are projected data.

February 18, 1980

Mr. **Braun**. What are your views on the long- and short-term implications of allowing or encouraging natural gas to back out oil in electric utilities?

Mr. **Curtis**. I think the Natural Gas Policy Act has in fact been successful in the short term, and the trends are positive as compared to the situation that previously existed. That has created an enthusiasm for natural gas that I believe we must keep within realistic bounds. It is true that interstate pipelines have 5.6 percent more gas this year than they had last year. It is also true that only 98 percent of gas was more indicated this year as compared to last year.

In other words, there was a 2-percent decline in gas marketed. I am sorry, I am referring to 1979 in comparison to 1978. That means gas is moving from the intrastate market to the interstate market. There are some trends, some positive signs for the future, but we should be cautious that we do not attempt to overspend natural gas available to us to such an extent that we may revisit the circumstance of the winter of 1976 and 1977.

The Commission has authorized a direct purchase program of natural gas for both electric utilities and major fuel burning installations, for a period that will terminate June 1. We are committed to reexamine supply, but we did so on the basis that there was a fuel oil shortage that could approach emergency proportions, that natural gas could allievate demand and would have a positive role to play in avoiding a shortage in fuel oil. That, among other things, has contributed to avoiding that danger. But the Commission was very careful to say that we have to know a lot more before we can rely on natural gas as a longer term strategy to back out oil and to reduce our oil dependency.

I would add one further caveat. We are going to examine that in the next couple of months. One further caveat: I think natural gas can be a useful incentive device to accomplish a long-term public purpose and objective.

For example, I believe that natural gas availability, because of its superior form characteristics, its environmental superiority, and because it is cheaper than oil, can be used as a means of encouraging and rewarding those who undertake the significant nonproductive capital costs of conversion to coal.

I believe that natural gas can be used as an incentive to coal conversion through a mechanism of exemption from incremental pricing.

Mr. **Braun**. That would not work for electric utilities.

Mr. **Curtis**. It would not work for electric utilities because Congress has chosen to exempt them already from incremental pricing without conditioning it to coal conversion.

Mr. **Braun**. Since electric utilities are exempt from incremental pricing, is it possible that if we encourage its use under electric utility boilers that we will frustrate the purpose of the Fuel Use Act of having those utilities switch to coal because natural gas would remain a cheaper source of fuel for them?

Mr. **Curtis**. I think that there are very significant concerns that should be evaluated, some of which your question has indicated. I think any time we are burning natural gas at below its commodity value or, in the case of recognizing the reality of our market circumstances, the marginal supply price to our fossil fuel-based economy is the weighted average handed import cost of oil, at least, and any time we are burning that natural gas at a price less than that, we disguise its true commodity value and we encourage a wasteful consumption of it.

That is true of residential consumption as it is true of industrial and electric utility consumption. Now, there are perhaps other reasons or explanations for doing that, but I think one has to use that as a starting point in determining or trying to evaluate your policies in this area.

Mr. **Braun**. Would it be fair to say that utilizing natural gas to back out fuel oil may decrease our dependence upon imported fuel oil but such back out only works to increase our dependence on imported natural gas supplies from such sources as Canada and Mexico?

Mr. **Curtis**. There is a potential of substituting one dependency for another. The ability to add significant increments of supply in the form of L. & G. I think is not there, at least in the near term up until 1990. I am talking about significant increments.

The ability to add significant increments from Mexico we hope may, in fact, be there. For Canada, we also hope there may be, so long as the economic consequences, the price at which the gas is available, is acceptable.

As a personal matter, I would rather have trade dependency on Canada and Mexico than dependency on some of our suppliers of oil Btu's.

Mr. **Braun**. What is your position on the issue of upgrading the end use of natural gas?

Mr. **Curtis**. Basically, I think it makes sense. I think that natural gas does have form values that should be reflected. I think that, generally speaking, it cannot be in our national interest to force new housing starts onto electricity, which is oil fired generation, if gas is available for residential home heating, just in terms of efficiencies and sensible policy.

Also, I am concerned here with, in essence, freezing the cue on natural gas which existed in 1973 or 1972 or 1971 or whatever you base period year was for the entire interstate system. Natural gas supplies 29 percent of the total industrial energy requirements and, to the extent natural gas is significantly less expensive than oil, you lock in some competitive advantage, you tend to freeze competitive relationships.

The further you get away from your base period, the worse that becomes. So, I believe that there should be, generally speaking, as a general policy, without saying that this is so in every case or in every situation, but as a general policy I would think that the national interest would lie in favor of low upgrading to the high priority uses.

But I want to very cautious to say here that this is a general inclination. I will have to evaluate the specific case as it comes.

Mr. **Braun**. Finally, would you please summarize the status of the Alaskan natural gas pipeline project before the Commission?

Mr. **Curtis**. Yes; I think we are waiting. The Commission has, I think, in place the basic elements to permit the pipeline financing to go forward. What remains is arranging for the participation by the State of Alaska and the owners of the Prudhoe Bay gas cap that has yet to be crystalized, as Mr. Bienstock's question to me reflected, by referring to an article appearing in the business section of this morning's Washington Post.

It suggested in fact that that is not yet accomplished. But the Commission is in the posture where we wait for that. We have taken, as far as I can tell, as much action as we can with respect to the matters that are now before us. We have done as much as we can now on the prebuilt segments, waiting some further action by the Government of Canada. We have done what we can now on the production relating cost issue.

We are waiting some further filing from the Secretary of Energy as he has requested of us. We have essentially done what we can on the incentive rate of return. We are awaiting the next stage in the filing of the certification cost estimates. There is a lot more work to be done but at least as far as the Commission is concerned, we are current and now beholding on others to take this measure forward.

Mr. BRAUN. Thank you, Chairman Curtis. Thank you, Mr. Chairman.

Mr. ATHY. With permission of the chairman, you can respond to these questions in the record.

What procedures will be used to implement the pooling study being conducted pursuant to section 205?

Prior to completion of the adjustment clause required under section 208 of FERC, what reform is the Commission taking to implement some suggestion that might be made in that study?

Next, for the record, what is the status of matters arising out of the coal strike? What progress is being made to enforce the overcharges that were alleged to be made during the coal strike? I think two rules on wholesale rate reform are now under consideration and maybe subject somewhat to delay. You can advise us on that and how the rates are being examined in terms of achieving economies of scale.

My last question is: With respect to your report on wholesale rate increases, causes, consequences, and possible remedies, where you make two specific recommendations for legislative change that can assist you greatly with the problem you are addressing, can you advise the committee in an outline of the problems on both sides of the case as to the jurisdictional question that arises?

In that report, you say—

> Hence, the Congress may be reluctant to act in this area unless it is first demonstrated that the present problems will resist administrative reform and continue unabated.

I think it would be candid to say you hedge on what the Congress should do, but it seems to me as though today you were saying Congress should tackle this rather thorny problem.

Mr. CURTIS. Yes; I think Congress should definitely reevaluate the jurisdictional relationships. I tried to say that in the report. I am not making a recommendation of outcome.

Mr. ATHY. Further, the present problem will resist administrative reform.

Mr. CURTIS. That is only the suggestion that Congress may want to wait and see what happens. If we can get our processes down to

12 months and do not get hit with another torrent of rate increase applications so that we can bring our caseload within manageable relationships, then the balance may swing in fact in favor of continuing the Federal jurisdiction. There are some benefits.

The question is whether the benefits outweigh the cost of this dual regulatory system. That is something that I just think the Congress should properly evaluate. It is the congressional policy that is important here.

May I ask two questions with respect to your questions, on what actions the Commission proposes to take, both with respect to the power pooling study and the fuel adjustment clause study? I will not be able to answer that until those studies are concluded and those recommendations formulated and adopted by the Commission.

Hopefully, this committee will find itself able to act on our budget before that happens.

Mr. **Athy**. The first question is: What procedures will be in place to implement recommendations that might come out of the pooling study or procedures you might be using? The second question is: What reforms are you undertaking independently of the automatic adjustment clause study and, last, to what degree have you contemplated using joint State boards to address the Federal Power Act.

Address some of the problems that arise on the jurisdictional question. To that you can respond in writing. No more questions, Mr. Chairman.

Mr. **Gramm**. Chairman Curtis, we would like to thank you for appearing before the committee. I certainly have looked at your budget. I wish I was as confident that all the budgets put forth by all of DOE and the Government as a whole were as good as yours.

Maybe that is because I agree with what you are doing and I do not agree with what many of the others are doing. Thank you, sir.

[Whereupon, at 4:10 p.m., the subcommittee was adjourned to reconvene at the call of the Chair.]

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FISCAL YEAR 1981 AUTHORIZATION FOR THE DEPARTMENT OF ENERGY AND THE FEDERAL ENERGY REGULATORY COMMISSION

WEDNESDAY, FEBRUARY 13, 1980

House of Representatives,
Subcommittee on Energy and Power,
Committee on Interstate and Foreign Commerce,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10 a.m., in room 2123, Rayburn House Office Building, Hon. Philip R. Sharp, presiding (Hon. John D. Dingell, chairman.)

Mr. Sharp. The subcommittee will come to order.

This morning we are going to continue our hearings on the Department of Energy authorization for fiscal year 1981. This morning we will be hearing from the Economic Regulatory Administration and we are delighted to have with us Hon. Hazel Rollins, the Administrator of the ERA. We will let her introduce herself and provide an opening statement and also introduce the other witnesses at the table that are with her.

STATEMENTS OF HAZEL R. ROLLINS, ADMINISTRATOR, ECONOMIC REGULATORY ADMINISTRATION, DEPARTMENT OF ENERGY; MELVIN GOLDSTEIN, DIRECTOR, OFFICE OF HEARINGS AND APPEALS; PAUL BLOOM, SPECIAL COUNSEL FOR COMPLIANCE; ACCOMPANIED BY LYNN COLEMAN, GENERAL COUNSEL, BOB DAVIS, ASSISTANT ADMINISTRATOR, FUEL USE PROGRAM, AND DOUGLAS G. ROBINSON, DEPUTY ADMINISTRATOR FOR POLICY

Ms. Rollins. Good morning. Thank you, Mr. Chairman.

With me are Lynn Coleman, General Counsel of the Department of Energy; Melvin Goldstein, Director of the Office of Hearings and Appeals; and Paul Bloom, Special Counsel for Compliance. In addition, there are various senior members of the ERA staff, including my Deputy for Policy, Douglas Robinson.

I have a prepared statement which I will submit for the record and I will briefly summarize the highlights.

Mr. Sharp. Without objection, your entire statement will be made part of the record. [See p. 467.]

Ms. Rollins. First, I would like to indicate that there have been some significant organizational changes; we have established two Deputies—one for Policy, Douglas Robinson who I just introduced, and one for Operations and Emergency Management, Barton House. We made this change to enable rapid responses to localized energy shortages and provide for a greater degree of day-to-day management for ERA programs. The change also permits increased attention to coordinating ERA regulatory programs within the DOE and with other Federal agencies.

We have also established a separate Office of Fuels Conversion, responsible for implementing the Fuel Use Act. This office was formerly a part of the Office of Fuels Regulation. I will briefly touch on ERA's activities.

First of all, in carrying out ERA's responsibilities under the Powerplant and Industrial Fuel Use Act, we have to date issued a total of 21 proposed prohibition orders, the first step in the FUA regulatory process. Coal burning could ultimately result in oil equivalent savings of 155,000 barrels per day.

ERA also issued a special rule enabling companies to petition for a temporary public interest exemption from the FUA prohibition on natural gas use. Thus far we have received over a thousand petitions from powerplants asking to qualify for such exemption. To date we have granted 456 exemptions which could displace about 263,000 barrels per day of distillate and low sulfur residual oil if the petitioners can obtain the requested natural gas.

Our responsibility under the Public Utility Regulatory Policies Act of 1978—PURPA—is to issue voluntary guidelines on several rate reform and regulatory standards, including the application of these standards to solar and a guideline on termination of service. We awarded about $17.2 million in grants and cooperative agreements to State utility commissions, nonregistered utilities and State utility consumer offices for PURPA implementation.

In addition, this unit is responsible for the intervention program which intervenes before FERC and State regulatory bodies seeking to encourage the PURPA rate standards. We have been where energy policy needed to be, advocated.

In the emergency planning area, we have developed a new proposed standby gasoline rationing plan. We are in the final stages of completing that plan within the Department and will forward it to the White House either this week or early next week.

In addition, we have the Energy Liaison Center which provides advice and guidance to the States regarding ERA's regulatory program. Last year we developed and placed in standby status our emergency regulations for both allocation and pricing of crude oil and petroleum products.

In the compliance area, the ERA has had an extraordinary year. Our compliance activities continue to mount. The most significant activity is the 18 criminal convictions that were made this past fiscal year. There have been 38 referrals of willful violation cases to the Department of Justice. Since the activation of DOE, we have identified over $11 billion in civil overcharges between both the Office of Special Counsel and Enforcement.

I would like to now briefly discuss on decontrolled products. ERA regularly monitors decontrolled products. We assisted in reaching the President's target of 240 million barrels of distillates in primary stock for this year's heating season. We believe we were able to influence production levels of heating oil and diesel fuel and accelerate deliveries to wholesalers and retailers. We worked with other Federal agencies to try to relieve short-term localized shortages on decontrolled products and have spent a great deal of time helping petroleum suppliers and consumers to secure necessary supplies of aviation fuels which have been decontrolled since last February.

On the regulatory development side, we have in place now regulations to phase out the remaining crude oil controls and we are continuing our process to attempt to simplify those regulations that are still on the books. For example, last summer we revised the pricing regulations for independent service stations to permit them to recognize increased costs but to fairly provide for understandable regulations which might be more easily enforced. We continue to move forward and will very shortly finalize similar rules for wholesalers and for retail stations owned and operated by refiners and jobbers. A few products remain under control and we will continue to discharge our mandate of responsibilities.

I would like to move now quickly to our budget request. In the fuels conversion area we are requesting $30.6 million for the implementation of the Fuel Use Act; $20 million is for the contractual assistance necessary to complete the technical analyses to implement the fuel program. We expect to issue additional proposed prohibition orders or negotiate voluntary conversions affecting 36 facilities in fiscal year 1980 and 15 proposed prohibition orders or voluntary conversions during fiscal year 1981. This $20 million represents work to be performed by very sophisticated technicians and without this work the program will not really be completed.

In the utility programs area we are requesting $33.1 million. This is to continue our work with the public utility commissions in providing, staffs to implement the standards. We will continue our intervention work which I discussed earlier.

In the regulation development area our request this year is for $2.7 million. As I indicated, we will simply continue to focus on adjustments to our crude oil programs as phased decontrol continues, simplify the regulations for products still under controls and develop standby regulations for both crude oil and petroleum products.

With regard to compliance, the request is for $67.3 million. Funding requested will be used as a followup for enforcement actions which have already been identified, to move those actions through the administrative and litigation process.

In the fuels regulation or petroleum operation area the request is for $11.4 million. This will permit the ERA to continue to provide guidance and direction in the allocation of controlled products and will accelerate our cooperative efforts with respect to decontrolled products.

In emergency preparedness the request is for $4.9 million. This request includes the completion of the standby rationing plan and an assessment of the requirements of the diesel rationing plan. We will also maintain the capability to meet energy emergency mobilization responsibilities and provide an energy emergency management capability between States and the Federal Government, including technical assistance and maintenance of the Energy Liaison Center.

Finally, the request for program administration is for $3.5 million. These funds will provide for the management direction of the ERA programs, public information, operations planning, evaluation, and support and for, the energy guidelines.

I would point out that this budget reflects, a status quo; that is, a situation where there are not prolonged or provocative shortages. We believe it is a very tight and lean budget and it stands on its face as one that would allow us to get, through a business as usual year.

This concludes my testimony. I have provided this morning to the subcommittee, under separate cover, answers to the questions that were set forth by the chairman last week. I can now respond to questions. However, some of my colleagues have prepared statements you may want to take now.

[Testimony resumes on p. 512.]

[Ms. Rollins' prepared statement and attachment follow:]

STATEMENT OF HAZEL R. ROLLINS, ADMINISTRATOR, ECONOMIC REGULATORY ADMINISTRATION

Mr. Chairman and members of the Subcommittee, I appreciate the opportunity to testify on the FY 1981 DOE Authorization for those programs which are the responsibility of the Economic Regulatory Administration. I would first like to highlight significant organizational changes made since last year and report to you on recent accomplishments. I will then describe the ERA activities for which we are requesting a $154 million funding authorization. There are two tables attached to my testimony: the first shows a comparison of our FY 1981 request with the FY 1980 appropriation; and the second reflects the reporting relationships of ERA programs.

Since we last had the opportunity to discuss our organization with your Subcommittee, two significant changes have occurred. The first involves a change in the Administrator's office. We have established two Deputy Administrators; one for Policy, and the other for Operations and Emergency Management. This change was made to enable rapid responses to localized energy shortages which have been occurring with increasing frequency, and to provide a greater degree of day-to-day management for ERA programs. The change also permits increased attention to coordinating ERA regulatory programs within the DOE and with other Federal agencies.

We also established a separate Office of Fuels Conversion, responsible for implementing the Fuel Use Act. It was formerly a part of the Office of Fuels Regulation. This action was taken to support the Department's emphasis on encouraging the use of coal and other alternative fuels. The former Office of Fuels Regulation is now called the Office of Petroleum Operations to more accurately reflect the functions of that office.

ERA is responsible for regulatory activities including prohibition of the use of oil and gas by new powerplants and major industrial installations and encouragement of the conversion of existing facilities to coal and other alternate fuels. Regulatory authority also provides for control of oil, gas and electricity imports and exports and equitable pricing and allocation of crude oil and petroleum products. Where possible, ERA seeks to guide rather than to regulate the behavior of the petroleum industry to best serve the Nation's interests.

ERA Activities

Fuels Conversion

In carrying out ERA's responsibilities under the Powerplant and Industrial Fuel Use Act, we have to date issued a total of 21 proposed prohibition orders, the first step in the FUA regulatory process. We issued these orders to existing oil and gas burning utility power plants and one Federal facility. We also have negotiated the voluntary conversion to coal of three additional power plants. Coal burning at these facilities could ultimately result in oil equivalent savings of 155,000 barrels per day.

ERA also issued a special rule enabling companies to petition for a temporary public interest exemption from the FUA prohibition on natural gas use. The exemptions permit electric power plants to burn natural gas if this action will displace oil. To date, petitions have been received affecting 1,114 power plants. ERA has granted 456 exemptions which could displace 263,000 barrels per day of distillate and low sulfur residual oil if the petitioners can obtain the requisite natural gas.

Utility Systems

Under the Public Utility Regulatory Policies Act of 1978 (PURPA), ERA issued voluntary guidelines on several rate reform and regulatory standards, including the application of these standards to solar and a guideline on termination of service. The first annual report on progress on PURPA implementation will be made to Congress in May 1980. We awarded $17.2 million in grants and cooperative agreements to state utility commissions, nonregulated utilities and state utility consumer offices for PURPA implementation. In the power supply area, ERA set up an electricity monitoring station to obtain current information on electricity transfers. This will help facilitate displacement of oil through interregional transfers, and promote awareness of the impact of major electric power supply disruptions. This office is responsible for the continuing assessment of electricity supply, reliability and distribution of delays in construction of major power plants. We have intervened in a number of Federal and state proceedings to advocate national energy policy. Interventions at the ICC addressed adverse effects of coal tariffs on utility plant conversions. FERC interventions included proceedings covering oil pipeline tariffs, coal gasification and mandatory interconnection under PURPA. At the state level, we have intervened in five proceedings considering the PURPA rate standards.

Emergency Planning

To prepare for a major energy supply interruption, ERA has developed a new proposed standby gasoline rationing plan. We have considered a number of issues raised by the public and have recently consulted with this Committee on specific details of the proposed plan. It is now under final review in the Department of Energy.

Other emergency planning activities include our Energy Liaison Center which provides technical assistance to State and local governments for developing and maintaining energy emergency plans. In addition, the standby regulations for the allocation and pricing of crude oil and petroleum products, adopted in January 1979, are maintained as a contingency in the event of a severe disruption in energy supply or distributio Also, a Middle Distillate Management Group was formed to direct Federal efforts in resolving seasonal and geographic distillate shortages. This has been accomplished with substantial cooperat from State and local governments, and the private sector.

Compliance

ERA has reported to you regularly on the status and accomplishments of the compliance programs. Compliance activities during the 1979 fiscal year resulted in eighteen criminal convictions and the referral of thirty-eight willful violation cases to the Department of Justice. Since the activation of DOE, over $11 billion in civil overcharges have been identified.

The Office of Special Counsel, responsible for audits of the Nation's 35 largest refiners, has completed audits of the top 15 major refiners for embargo period violations.

In addition, the Special Counsel conducted audits of current industry practices relating to gasoline and heating oil price rises. The Special Counsel staff audited the fifteen largest refiners to check their current gasoline pricing and allocation practices and the accuracy of data furnished to DOE.

The Office of Enforcement audits all other segments of the petroleum industry. Many of these firms are quite large. Some have annual sales of up to $500 million. The Office of Enforcement also increased its investigations of contemporaneous violations of DOE's regulations. We established a hot line to receive consumer complaints on heating oil and gasoline and received almost 32,000 complaints as of the end of last year. Many of these complaints alleged violations of gasoline price ceiling by retail service stations. 27,000 audits were conducted as a result of complaints received. From the date of issuance of the simplified gasoline pricing rule in August 1979, to the end of the year almost 4,000 violations were identified, resulting in over 3,600 price rollbacks. The effort to identify violations continues.

Decontrolled Products

ERA regularly monitors decontrolled products. We assisted in reaching the President's target of 240 million barrels of distillates in primary stock for this year's heating season. Through cooperative efforts with industry personnel, we were able to influence production levels of heating oil and diesel fuel and accelerate deliveries to wholesalers and retailers. We worked with other Federal agencies, the states, and industry to identify and resolve potential supply problems. We also assisted in implementing the Administration's energy assistance program to provide funds for those least able to pay for the rapidly rising costs of energy.

With respect to aviation fuels, which have been decontrolled since February 1979, we have worked informally with petroleum suppliers and consumers to secure necessary supplies to maintain stability in the marketplace.

Regulatory Development

ERA has put in place regulations to phase out the remaining crude oil controls and is continuing the process of simplifying its regulations and reducing the reporting burden on the

the oil industry. For example, last summer we revised the pricing regulations for independent service stations to recognize increased costs, to make the regulations easily understandable, and easier to enforce. We also have proposed rules to provide a simplified pricing mechanism for gasoline wholesalers and for retail stations owned and operated by refiners and jobbers. Last month, natural gasoline and butane were deregulated; only gasoline, propane and synthetic natural gas (SNG) feedstock allocations remain under controls. The use of the crude oil buy/sell program by small refiners was expanded to accommodate their difficulties in obtaining foreign crude oil. The Department continued the temporary suspension of oil import fees initiated by President Carter in April 1979, and helped plan for new oil-import restrictions, if necessary.

FY 1981 Authorization Request

I would like now to discuss activities in our budget request to Congress for FY 1981.

Fuels Conversion

We are requesting $30.6 million for the implementation of the Fuel Use Act. $20.8 million is for the contractual assistance necessary to complete the technical analyses required by FUA and NEPA compliance activities. These activities must be completed prior to issuance of final prohibition orders. Financial, engineering, fuel supply and environmental analyses will be prepared. ERA further expects to issue additional proposed prohibition orders or negotiate voluntary conversions affecting 36 facilities in FY 1980 and 15 proposed prohibition orders or voluntary conversions during FY 1981. This $20.8 million will also be used to perform the analyses necessary to support determinations on the approximately 155 petitions which are expected in FY 1981. These contracts are critical to completion of FUA responsibilities. The work performed will support our staff who have the decisionmaking responsibility on all prohibition orders or petitions for exemptions.

Utility Programs and Regulatory Intervention

The request for Utility Programs is $33.1 million. We will continue to advocate national energy objectives through formal testimony before state and Federal regulatory agencies. In FY 1981, we expect to participate in approximately 45 cases. We will continue grant assistance to the states and nonregulated utilities at the FY 1980 level. We will continue monitoring power supply interruptions and electric system operations and complete three major power pooling studies to demonstrate, among other things, oil savings through electricity transfers. ERA will assist states in the adoption of rates that encourage the efficient and equitable use of utility resources and promote the use of alternate sources such as solar and cogeneration. The National Reliability Study will also be completed.

Regulation Development

The request for Regulation Development is $2.8 million. In FY 1981 we will focus on adjustments to our crude oil programs as phased decontrol continues, simplify the regulations for products still under controls, and develop standby regulations for both crude oil and petroleum products. Also, we will undertake analyses of regulatory measures to promote the use of synthetic fuels or other fuel substitutes in place of petroleum and natural gas.

Compliance

The request for the Compliance program is $67.3 million. Funding requested will be used to follow-up on enforcement actions already identified through administrative and litigation phases. With the completion of embargo period audits we will redirect Compliance staff to the identification and remedy of more current violations. As the past period audits are completed, a slight reduction of about 60 in staffing will occur. We will also significantly diminish use of contract support. During the budget period there will be a shift in resource application from audit to case resolution activities.

Fuels Regulation

The request for Fuels Regulation, shown organizationally as Petroleum Operations, is $11.4 million. ERA will continue to provide guidance and direction in the allocation of controlled products and will accelerate our cooperative efforts with respect to decontrolled products. Under decontrol, ERA must play an important role in helping to assure that available supplies are distributed equitably. Experience indicates, as with middle distillates, that decontrolled products require a substantial amount of monitoring and coordinative efforts to achieve this goal.

Emergency Preparedness

The request for Emergency Preparedness is $4.9 million. This request includes the completion of the standby gasoline and diesel fuel rationing plan, assuming funds are provided as requested in a Fiscal Year 1980 supplemental. We will also maintain the capability to meet energy emergency mobilization responsibilities; and provide an energy emergency management capability between states and the Federal government, including technical assistance and maintenance of the Energy Liaison Center.

Program Administration

The request for Program Administration is $3.5 million. These funds will provide for: management direction of ERA programs; public information; operations planning, evaluation, and support; and our public "Hot Line".

I have provided separately the answers to questions received in your recent letters.

Mr. Chairman, this concludes my formal statement, I will be happy to answer any questions of the Subcommittee.

ECONOMIC REGULATORY ADMINISTRATION

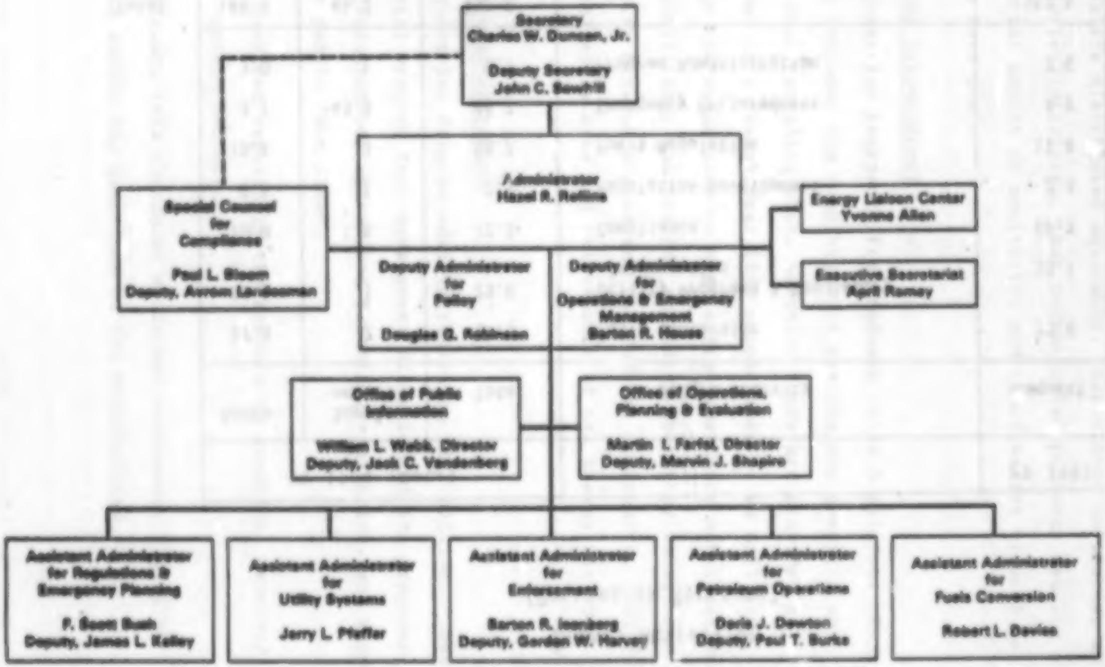
BUDGET ACTIVITIES

(DOLLARS IN MILLIONS)

	FY 1980 (Est.)				FY 1981
	Appro.	Supple-mental*	Total	Budget Activity	Request
	27.3	.2	27.5	Fuels Conversion	30.6
	28.9	.1	29.0	Utility Programs & Regulatory Intervention	33.1
	70.8	1.5	72.3	Compliance	67.3
	2.8	.1	2.9	Regulation Development	2.8
	10.4	.3	10.7	Fuels Regulation	11.4
	3.7	43.0	46.7	Emergency Preparedness	4.9
	3.0	.1	3.1	Program Administration	3.5
Total	146.9	45.3	192.2		153.6

* FY 1980 Supplemental includes $2.3 million for payraise and $43 million for Emergency Preparedness

U.S. Department of Energy
Economic Regulatory Administration
Headquarters Organization


Secretary
Charles W. Duncan, Jr.
Deputy Secretary
John C. Sawhill
Administrator
Hazel R. Rollins
Special Counsel for Compliance
Paul L. Bloom
Deputy, Avrom Landesman
Deputy Administrator for Policy
Douglas G. Robinson
Deputy Administrator for Operations & Emergency Management
Barton R. House
Energy Liaison Center
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Office of Public Information
William L. Webb, Director
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Martin L. Farfel, Director
Deputy, Marvin J. Shapiro
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F. Scott Bush
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Assistant Administrator for Utility Systems
Jerry L. Pfeffer
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Barton R. Isenberg
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Doris J. Dewton
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Assistant Administrator for Fuels Conversion
Robert L. Davies

January 1980

Department of Energy
Washington, D.C. 20461

FEB 12 1980

Honorable John D. Dingell
Chairman, Subcommittee on Energy
and Power
Committee on Interstate and Foreign
Commerce
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

Thank you for your letter of February 6, 1980, inviting me to testify before your Committee on February 13.

The questions raised in your letter are addressed in the enclosure. I look forward to working with the Committee and I hope that these responses address your concerns.

Sincerely,

Hazel R. Rollins
Administrator
Economic Regulatory Administration

Enclosure

Responses to Chairman of SubCommittee on
Energy and Power, Letter of February 6, 1980.

Q. 1. Please provide a table showing for each program listed on the bottom of page 144 of the budget, for FY 1979 and FY 1980:

(a) the number of compliance cases;

(b) the total overcharges alleged;

(c) total recovery, broken down by

(i) bank adjustment,

(ii) refunds, price rollbacks,

(iii) penalties, payments to the Treasury, and

(iv) escrow accounts.

A. The enclosed Table 1 provides information on total cases and overcharges for the Office of Enforcement as of December 31, 1979. Table II provides total amount of recoveries for FY 1979. Table III provides total recoveries through the first quarter of FY 1980.

Table I

OFFICE OF ENFORCEMENT
OPEN COMPLIANCE CASES & ALLEGED OVERCHARGES

As of 12/31/79

Programs	Civil Audits	Special Investigations Related	Total Compliance Cases	Under Active Audit	Audits Completed in Legal Process	Total Alleged Overcharges
Crude Oil Resellers	52	60	112	89	23	$ 292,117,850
Independent Crude Producers & Importers	218	20	238	93	145	103,672,005
Small Refiners, Entitlements & Data Verifications	116	54	170	163	7	375,369,055
NGL (Independent)	55	2	57	56	1	385,118,115
Resellers & Retailers	348	67	415	288	127	154,246,055
TOTAL	789	203	992	689	303	$ 1,310,523,080

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Table II

ENFORCEMENT RECOVERIES
10/1/78 - 9/30/79

Programs	Bank Adjustments	Refunds, Rollbacks, & Others	Penalties & Payments to U.S. Treasury	Escrow Accounts	Total
Crude Oil Resellers	-	$ 4,081,528	-	-	$ 4,081,528
Independent Crude Producers & Importers	-	7,956,682	$ 98,248	$ 7,167,755	15,222,685
Small Refiners, Entitlements & Data Verifications	$20,815,567	15,130,460	61,250	15,057,115	51,064,392
NGL (Independent)	-	1,199,310	8,500	2,011,546	3,219,356
Resellers & Retailers	60,948	8,735,501	327,349	3,198,867	12,322,665
TOTAL	$20,876,515	$37,103,481	$495,347	$27,435,283	$85,910,626

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Table III

ENFORCEMENT RECOVERIES
10/1/79 - 12/31/79

Programs	Bank Adjustments	Refunds, Rollbacks, & Others	Penalties & Payments to U.S. Treasury	Escrow Accounts	Total
Crude Oil Resellers	-	-	-	-	-
Independent Crude Producers & Importers	-	$224,972	$268,146	$ 4,955,793	$ 5,448,911
Small Refiners, Entitlements & Data Verifications	-	47,228	1,850	-	49,078
NGL (Independent)	-	25,484	7,000	4,212,664	4,245,148
Resellers & Retailers	-	626,726	17,653	2,051,614	2,695,993
TOTAL	-	$924,410	$294,649	$11,220,071	$12,439,130

Q. 2. We are pleased to find that the budget for Regulation Development includes just $110,000 for contracts, compared to last year's request for $3,000,000. The Subcommittee reduced that amount to $500,000. Please provide a list of all contracts in FY 1980 for this office.

A. Approximately $400,000 is planned for regulation development contracts in FY 80. Enclosed Table IV identifies actual and planned contracts.

Table IV

REGULATION DEVELOPMENT

FY 1980 LIST OF ACTUAL AND PLANNED CONTRACTS

Contractor	Amount	Description
Washington Pathfinders Service, INc.	$ 6,530	Analysis and support for Crude Oil Reseller Hearing
Dames and Moore	500	Computer time needs assessment for Coal Regulation Analyses
Jack Faucett Assoc.	119,172	Natural Gas delivery priority analysis
Calculon	30,000	Record management support
Pasadena Research	9,243	Analysis and support for Gasoline Reseller Hearing
Micromage	9,300	Data analysis support for integrated docket file system
First Harlem Management Corp.	18,000	Public hearing process support
Energy Resources Co, Inc.	35,000	Settlement based on decision of DOE Board of Contract Appeals
—	16,756	Comparison of methods to account for escalating fuel costs
—	35,000	Microfische of regulation docket files
—	48,000	Analysis and evaluation of 18 public hearings for Product Price Regulations
—	25,000	Economic Analysis of Standby Price Regulations
—	32,000	Technical support for FUA revisions
—	20,000	EPA assessment of unloaded gas prices (Interagency Agreement)
Total	$ 404,501	

Q. 3(a) **What is the current status of the DOE's "interim rules" implementing the Powerplant and Industrial Fuel Use Act?**

A. Interim rules have been prepared to cover:

(1) exemptions from the prohibitions on new power plants and industrial facilities;
(2) conversions of and exemptions to existing facilities;
(3) classification of transitional facilities; and
(4) the systems compliance option.

These FUA interim rules will remain in effect until about the summer of 1980 when final rules will be issued.

Q. 3(b) What is the timetable for issuing final rules?

A. ERA has received over 300 in-depth public comments on the interim regulations from States, public utility commissions, industry, utilities and others such as the White House Regulatory Analysis Review Group. ERA, along with other segments of DOE, is in the process of reviewing and assessing these comments. We are focusing on two particular areas:

(1) Reducing the regulatory burden on the general public associated with the filing of exemptions and the processing of prohibition orders.

(2) The economic test for exemptions from the prohibitions on oil and gas use under FUA. The Fuel Use Act requires issuance of an exemption to permit

A to Q. 3(b)

use of oil or gas if the use of coal or other alternate fuel "substantially exceeds" the cost of using imported oil. ERA will further define "substantially exceeds" in the final regulations.

We expect final rules, including a regulatory analysis to be issued during the Summer of 1980.

Q. 3(c) **The budget book (Vol. 7, p. 127) states that the "DOE will expand its coal regulations, including those authorized by FUA for non-boilers, categories of users, and systems compliance systems". Please explain what is contemplated in this expansion.**

A. **The Economic Regulatory Administration plans to continue developing rules to carry out the requirements of FUA.**

Section 202(b) of FUA gives DOE the discretionary authority to prohibit the use of oil and natural gas for certain categories of users in new industrial non-boilers -- which have been limited to gas turbine, combined cycle and internal combustion units. ERA is currently assessing whether it should proceed with such a rule and which industrial categories of users such a rule should apply.

Title V of FUA provides for a System Compliance Option for certain utilities which are subject to the statutory ban on using natural gas after 1990. System Compliance permits

A to Q. 3(c) continued

negotiations of a system wide compliance under FUA rather than on a unit by unit basis. ERA has issued interim rules on System Compliance and expects to finalize these rules by Summer of 1980.

Q. 3(d) The budget book (Vol. 7, p. 156) earmarks over $20 million for contracts for the "fuels conversion" program. Over $10 million of this sum is for the "environmental analysis NEPA compliance" concerning petitions for exemptions. In addition, the budget book (Vol. 7, p. 134) states that "at least 80% of all permanent exemption requests" will require an EIS which could take up to 12 months to complete. However, section 763(2) of the Act specifies that the granting or denial of a permanent exemption for existing facilities is not, with some exceptions, a major Federal action under NEPA, and that no EIS is required for temporary exemptions. The budget book states that there will be 155 permanent and temporary exemption petitions in FY 1981 and it assumes that all will require an EIS.

(i) What is the basis for this assumption?

A. The 155 exemption petitions projected for FY 81 include 25 petitions for temporary exemptions. The assumption is that some form of environmental analyses may be associated with each temporary exemption, although no formal NEPA compliance activities are required. The level of assessment will vary depending on the nature of each case for a temporary exemption. Only petitions for a permanent exemption will be subject to NEPA compliance activities, which involve several levels of review. When environmental impacts are insignificant a memorandum documenting that fact will be sufficient. If the impacts are clearly significant a formal environmental impact statement (EIS) will be prepared, otherwise an environmental assessment (EA) will be prepared.

A to Q. 3(d)(i) continued

If the EA shows that the impacts are insignificant a Finding of No Significant Impact will be issued. If they are judged significant an EIS will be prepared.

(ii) Are all 155 expected to be petitions for permanent exemptions subject to the exceptions in section 763(2)?

A. Of the 155 petitions expected, the 25 temporary exemptions will be subject to the exclusions of section 763; they will be excluded from NEPA compliance under Section 763(1). None of the remaining 130 permanent exemptions are expected to be excluded from NEPA compliance because they are projected to be petitions from new facilities only. The exclusions contained in Section 763(2) pertains to certain categories of exemptions available to existing facilities. Costs for environmental analysis and NEPA compliance for exemption petitions associated with existing facilities are contained in the estimates for processing prohibition orders. It is believed that the issues of exemptions for existing facilities will only be raised during FY 80 by the recipients of proposed prohibition orders as defenses, and the environmental analysis required will be included within that necessary to perfect the orders. It is not anticipated that any petitions for exemption from the statutory prohibitions associated with natural gas usage in existing electric powerplants (Section 301(a)) will be received in FY 80.

A to Q. 3(d) continued

(iii) What is the basis for the 80% prediction concerning permanent exemptions?

A. Workload projections for FY 1981 for permanent exemption petitions are based on an assumption that 80% of the total new boiler sales will likely involve a desire to burn either all or in part petorleum and/or natural gas. This projection decreases in outyears to 60%. This prediction is based on past records of boiler sales and the nature of the fuel desired to be used in those boilers. Subsequent budget requests including future year projects of total petitions will reflect FY 1980 actuals and the percentage will be adjusted accordingly.

(iv) What is the estimated contract cost for each such EIS?

A. The cost of environmental analysis and NEPA compliance will vary based on case complexity and the particular environmental questions at issue. The first environmental analysis conducted in association with a petition for permanent exemption from the prohibitions of FUA led to a Finding of No Significant Impact. It was conducted by the DOE, Argonne National Lab at a cost of $60,000. Converting such an EA document, had it been necessary, into a formal environmental impact report supporting an EIS would have increased the cost to over $100,000. On the other hand, memoranda for the record, where environmental impacts are insignificant will, have minor costs associated with their preparation. Based on these current estimates the cost of environmental analysis and NEPA compliance will average about $70,000 a case for exemption petitions.

A to Q. 3(d) continued

(v) Why cannot DOE personnel prepare these EIS statements?

A. The DOE does prepare the necessary environmental impact statements. However, it does not prepare the environmental reports that support such statements. To do so would be impractical because of the level of internal staff effort required as well as the disparate disciplines needed. Conduct of environmental analysis requires staff with expertise in such areas as air quality, waste disposal, water quality, and socioeconomic impacts. In order for the DOE to prepare these documents in-house, we estimate an in-house staff of more than one hundred additional people within these various disciplines would be required. A more appropriate means is to hire, on a task type level of effort basis, support to provide the necessary environmental analytical capability to complete the environmental impact analysis and report. Because of the level of complexity of these environmental impact analysis and the disparate nature of the issues requiring assessment, the most cost effective way is to contract for such analysis. DOE staff employees manage and coordinate the conduct of the analysis, interface within the DOE and with other federal angencies on issues requiring assessment, and evaluate technical assessments prepared by contractors. All decision making and policy determinations are by DOE personnel. The DOE thus relies on contractor support for indepth technical and scientific analysis in support of DOE decisions to grant or deny petitions. As such, the environmental assessments and environmental impact

A to Q. 3(d)(v) continued

statements are prepared externally. They are reviewed and processed internally within the DOE and converted to environmental impact statements which are processed in accordance with NEPA compliance procedures. Scoping the basic issues associated with the document, and ensuring that it is consistent with the petitions as well as NEPA and CEQ and DOE regulations is the responsibility of DOE personnel.

Q. 3(e) The budget book (Vol. 7, p. 134) states: "The effect required to process permanent exemptions includes the time needed for pre-petition conferences, review of petitions for adequacy, data collection and analysis which includes site visits, evaluations of contractor engineering and financial reports, generation and evaluation of company and industry statistics, compliance with the NEPA process, conducting of hearings and evaluation of records, preparation of orders, responses to Freedom of Information requests, Congressional testimony, and preparation of Federal Register notices."

(i) Please tell us which of the above list of functions relating to "process permanent exemptions" requires that they be performed by contract, rather than DOE personnel.

A. Processing permanent exemptions from the prohibitions of the Fuel Use Act includes managing the administrative process, and conducting environmental analysis, NEPA compliance activities, and technical and financial analyses in support of regulatory findings needed to grant or deny petitions. Within these activities, external support (contractors) participation is needed in the conduct of environmental, engineering, financial and fuel supply and transportation analyses. These analyses will be used by DOE personnel in

A to Q. 3(e)(i) continued

preparation of the necessary regulatory findings to support decisions associated with granting or denying petitions. DOE personnel will manage the administrative process associated with the processing of exemption petitions. They will conduct pre-petition conferences, review petitions for accuracy, conduct site visits, conduct hearings, evaluate records, prepare orders, respond to freedom of information requests and prepare Federal Register notices, as well as manage and direct the environmental, technical and financial analyses and the NEPA compliance process. Decisions of a policy nature throughout the entire process and final decisions associated with exemption petitions are the sole responsibility of the DOE, who is charged with implementing FUA. Contractor analytical support provides the technical and economic input on an as required basis depending on the nature and complexity of the petition.

(ii) Why cannot each of these functions be performed in-house?

A. The vast majority of functions associated with processing exemption petitions are conducted in-house. However, because of the varying nature and volume of financial, technical, engineering and environmental analysis associated with processing exemption petitions, it would be impractical to have internal staff with such a capability. Instead, task type level of effort contracts awarded on a competitive basis are used to obtain the necessary analysis on an as required basis for specific cases. These analyses are then

A to Q. 3(e)(ii) continued

used as factual inputs to necessary regulatory findings and decision documents. Thus, the number of DOE personnel is kept at the level necessary to perform government functions yet quality external DOE analytical capabilities are available on a timely basis in a wide variety of disciplines on a level of effort basis.

(iii) Please provide any analysis performed by DOE concerning the relative merits of performing such work in-house vs. contracting.

A. No formal analysis was conducted regarding the relative merits of performing technical and economic analysis in-house versus contracting. However, as described in the answers to the foregoing questions a balance was struck between in-house DOE personnel conducting FUA activities and external support. Because regulatory decisions and major recommendations associated with such decisions are staffed by DOE personnel and because such decisions must be supported by documentation prepared by DOE personnel, a cadre of DOE personnel necessary to accomplish this is planned for. However, the disparate analytical requirements, which depend on the nature of the petitions for exemption from the prohibitions of an Act, make it impractical to have such a multidisciplined staff available within the Office of Fuels Conversion. A more appropriate solution is to obtain task type level of effort contracts with external organizations capable of providing the necessary talents in each of the disciplines to whatever depth is necessary on an as required basis. Thus, depending

A to Q. 3(e)(iii) continued

on the level of workload and the nature of the analytical requirements, task orders are structured accordingly and government funds commensurate with such level of effort are expended. To operate otherwise would require that the government obtain a vast resource of personnel in a number of disciplines because of the disparate and variable workload.

(iv) Please provide a table showing all contracts entered into by the DOE to carry out functions under the Fuel Use Act since the data of enactment. The table should state: (a) a description of the work (please indicate if it relates to any specific petition for exemption, and if it does, identify the petitioner); (b) the identity of the contractor; (c) date of contract award; (e) date of completion; (f) status; and (g) amount of contract.

A. Contractors and the areas in which they have provided support are listed in Table V enclosed. (Minority owned small businesses are indicated with an asterisk.)

In addition, during 1979, the Argonne National Laboratory, Oak Ridge National Laboratory, and Pacific Northwest Laboratory provided support to ERA in implementing FUA. The laboratories participate in the Office of Fuels Conversion implementation of the FUA by conducting analyses in support of exemption petition processing and prohibition order finalization. This support includes detailed engineering, financial, fuel supply and transportation, and environmental analyses, as well as preparation of environmental impact statements. Laboratory support has been and will be utilized in only the most complicated cases.

COMPANY	AREA OF SUPPORT	TYPE SOLICITATION	AWARD DATE	COMPLETION DATE	AMOUNT	STATUS
Energy & Environmental Analysis, Inc. Arlington, VA	Fuel Characteristics Analysis	Competitive	9/30/79	9/29/80	$68,000	33% Complete
Walden Research Division of Abcor, Inc. Wilmington, MS	Environmental Analysis	Competitive	9/30/77	2/28/80	$643,792	Novation Agreement Pending
Environmental Assessment Council* New Brunswick, NJ	Environmental Analysis	Small Business/ Minority Owned	9/27/78	2/28/81	$272,887	On Going
Environmental Assessment Council* New Brunswick, NJ	Environmental Analysis	Small Business/ Minority Owned	9/28/78	2/28/81	$258,358	On Going
Dames & Moore Atlanta, GA	Environmental Analysis	Competitive	9/21/77	8/1/79	$341,107	Compeleted
Analysis Group, Inc.* Washington, D.C.	Environmental Analysis	Small Business/ Minority Owned	9/29/78	5/31/80	$118,898	On Going
Mapora, Inc. Washington, D.C.	Environmental Analysis	Competitive	9/27/78	9/30/79	$181,378	Completed
ICF, Inc. Washington, D.C.	Coal Supply and Transportation Analysis	Competitive	9/29/78	9/28/80	$403,396	Task Order Pending
PEDCO Environmental, Inc. Cincinnati, OH	Engineering Analysis	Competitive	6/1/79	9/30/82	$660,000	On Going
Ultrasystems, Inc. McLean, VA	Financial Analysis	Competitive	9/29/78	9/28/80	$380,546	On Going
Omniplan Corp.* Washington, D.C.	Environmental Analysis	Small Business/ Minority Owned	9/30/79	9/30/80	$178,347	On Going
A.L. Nellum & Associates* Washington, D.C.	Environmental Analysis	Small Business/ Minority Owned	9/30/79	9/30/80	$199,018	On Going
AMAF Industries, Inc.* Columbia, MD	Federal Facility Support	Small Business/ Minority Owned	8/10/79	9/20/80	$186,934	On Going
ARAMAK* New York, NY	Financial Analysis	Small Business/ Minority Owned	9/27/79	9/27/80	$185,643	On Going
Automated Management Systems* Lanham, MD	Engineering Analysis	Small Business/ Minority Owned	9/29/79	9/29/80	$44,276	On Going
OAO Corporation* Beltsville, MD	Financial Analysis	Small Business/ Minority Owned	9/28/79	3/28/81	$99,360	On Going
Arthur Young & Co. Washington, D.C.	Data on Coal-Capable Powerplants	Competitive	6/15/79	11/9/79	$58,762	Task Complete Contract Open

TABLE V

A to Q. 3(e) (continued)

(v) Why is the term "Congressional testimony" included as part of the process of considering permanent exemption petitions?

A. The term "Congressional testimony" should have been "Litigation testimony." The Office of Fuels Conversion requires some staff effort to ensure that testimony is reviewed and factored into the program.

Q. 4. The budget book (Vol. 7, p. 134) indicates that most petitions for exemptions will not be completed within the time frame specified in section 701(c)(3) of the Fuel Use Act. Is that correct? If so, how long will it take to complete the process? What has been the experience to date?

A. Section 701(c)(3) of the Fuel Use Act provides that "The Secretary within six months after the period for public comment and hearing applicable to any petition for an exemption permit shall issue a final order granting or denying the petition for such exemption or permit, except that the Secretary may extend the period to a specified date if he publishes notice thereof in the Federal Register and includes with such notice a statement of the reason for such an extension." It is contemplated that all petitions for exemption will be completed within the time frame specified in Section 701(c)(3) of the Fuel Use Act.

It is anticipated that for the most part the period between the final hearing if requested on the Tentative Staff Determination and the issuing of the final order granting or denying a petition will at most be 3 to 4 months. Although the entire process in the situation where an environmental

A to Q. 4 continued

impact statement is required may take as long as 13 months. It is anticipated that in the future in those situations where an environmental assessment is required the period from acceptance of the petition to issuing the final order would be 9 months. For those cases where a temporary exemption has been petitioned the period would be 6 months.

The first case which required only an environmental assessment was completed in a period of 6 months. This was accomplished because the case load at the time was relatively minor.

Q. 5. The budget book (Vol. 7, p. 123) proposes to delete language in the Appropriation Act prohibiting payment of expenses of parties intervening in regulatory proceedings. If that language is deleted (a) what regulatory proceedings would funds for intervention be used for, and (b) what guidelines or standards would you apply in approving funding for intervention?

Assumming the availability, funding for intervention could be used for all formal regulatory proceedings carried out by the Department. For example, hearings on the Gas Rationing Plan. However, no specific funds are included in the Economic Regulatory Administration's budget for that purpose. The Department has developed draft regulations which incorporate aspects of existing programs established by the Department of Agriculture, Federal Trade Commission, National Safety Transportation Board and other federal agencies. However, due to the need to further develop some of the administrative aspects of the program and the current restrictions imposed by Appropriation committees, these regulations have not been proposed.

A to Q. 5 continued

It is important to note, that the President in his State of the Union message to Congress stated:

> "My Administration will continue to support efforts to provide financial assistance in regulatory proceedings to citizen groups, small businesses and others whose participation in limited by their economic circumstances. These programs are needed to balance the regulatory process by assuring opportunities for broad public involvement in these proceedings."

We feel strongly that such a program should be developed in the Department, and are working with the Office of Consumer Affairs to bring such a program about.

Q. 6. The budget book (Vol. 7, p. 125) states that the ERA budget request does not include the $43 million supplemental for emergency preparedness. In response to questions at our January 31, 1980 hearing on rationing, you said it was not your responsibility to pursue the supplemental and that the supplemental "is inappropriate" in that it "does not address" the rationing proposal now being considered by the DOE. Yet, the budget book (Vol. 7, p. 151) indicates a total budget of about $4.9 million for emergency preparedness which includes rationing. Of that sum, $2.9 million is for contracting, but only $750,000 is rationing related.

Q. 6(a) What is the sum needed in FY 1980 and 1981 for rationing pre-implementation activities?

A. Because of limitations imposed by Congress on the use of contract support in developing the rationing plan, the Department has not been able to complete the estimation of costs for rationing pre-implementation activities. As soon as these estimates are complete, they will be submitted to the Office of Management and Budget for their review.

The Department intends to have those costs ready when the final plan is submitted to the President. Those costs will

A to Q. 6(a) continued

likely be included in the progress report to Congress along with the final rationing plan that the President transmits to Congress for approval.

Q. 6(b) The budget book (Vol. pp. 151-152) lists several pre-implementation activities. Please provide dollar estimates for each and indicate which will be performed in-house vs. contracts.

A. I indicated in my testimony before the House SubCommittee on Energy and Power on January 31, 1980, that the complete structure of the plan has not been finalized and costs may be different than the original estimate. The Department will submit new cost estimates and a request for funding of those activities once the plan has been approved by the President.

Q. 6 (c) Is the Administration supporting enactment of the supplemental in 1980? What activities will be financed by this sum? Please make certain that OMB concurs in your reply.

A. The Department does intend to request a supplemental appropriation during 1980; however, the amount of the request and the activities involved may be somewhat different from those reflected in the Supplemental appropriation request now before the Congress.

A to Q. 6(c) continued

The Department intends to provide estimates for the new supplemental and details on contract and in-house activities that will be financed by that supplemental appropriation when the final plan is submitted to Congress.

Q. 6 (d) In your January 31 testimony, which was cleared by OMB, you state that once the current rationing plan is approved, it would require 17 to 21 months to implement and that this period could be reduced to 7 to 12 months "if sufficient resources and personnel are authorize." However, within the 17 - 21 month period, the EPAA will terminate.

(i) What funds and personnel will be required to implement rationing in 17 to 21 months? Please provide a breakdown of this estimate.

(ii) What funds and personnel will be required to implement rationing in 7 to 12 months? Please provide a breakdown of this estimate.

A. The Department has not yet completed its final analysis of those costs and personnel necessary to pre-implement rationing within 17 to 21 months or to accelerate pre-implementation time to between 7 and 12 months. However, as soon as those estimates are complete, they will be submitted to the OMB for review and then to the Congress.

Q. 6 (e) In your January 31 testimony, you said that "some special contract authority" will be needed in connection with rationing. Please explain why such authority is needed, what it should be, and when it will be requested.

A. If a workable rationing plan is to be pre-implemented on an expedited basis, it would be impossible to use normal competitive procurement practices for much of the contract work involved. Normal procurement procedures can take as long as 6 to 9 months. Consequently, if Congress wants the plan developed on the accelerated timetable, expedited

A to Q. 6(e) continued

procurement and hiring authorities must be granted, for example, sole source procurement flexibility.

The Department intends to identify which stages of the plan's development would require expedited contracting procedures when the plan is submitted to Congress later in February.

Q. 6(f) Have you consulted with the Office of Consumer Affairs in developing a rationing program?

A. We have consulted with the Office of Consumer Affairs and they actively participated with ERA in the public hearing process. The Office of Consumer Affairs also provided a summary of consumer organizations' comments and concerns for ERA consideration in the development of the revised gas rationing plan.

Q. 7(a) We request that the Special Counsel provide a table of all consent agreements reached to date by that office. That table should show the company involved, the estimated dollar of the overcharges, the total dollar settlement, a breakdown of that settlement indicating what, if any, sums are retained by the company for any purpose and the current status of each item on the settlement.

A. The enclosed Table VI provides a listing of all consent orders and settlements as of January 31, 1980.

Office of Special Counsel Settlements
As of January 31, 1980

				REMEDY 3/							
Refiner	Document	Date	Total Alleged Violations 2/	Refund to Customer	Price Rollback	Elim. of Price Inc.	Investment Commitments	Other	Total	Civil Penalty	Criminal Fine
Global Settlements											
Cities Service	CO	10/31/79	$ 298,731,657	$10,000,000	$20,000,000	$190,000,000			$220,000,000		
Getty	CO	12/04/79	58,853,010			50,000,000		$25,000,000	75,000,000		
Kerr-McGee	CO	02/07/79	6,753,524	52,636,626		8,000,000			60,636,626	$10,000	
Phillips	CO	11/09/79	256,682,935	3,000,000		75,000,000	$122,000,000		200,000,000		
Other Settlements											
ARCO	RO	08/06/79	65,914	65,914					65,914		
ARCO	CO	10/25/79	Not Specified	16,813					16,813		
Chevron	CO	09/22/78	Not Specified	Not Specified						25,000	
Chevron	CO	12/04/78	83,000	83,000					83,000		
Chevron	CO	07/17/79	8,132,889			4,100,000			4,100,000		
Chevron	CO	11/15/79	12,074,000			12,074,000			12,074,000		
Chevron	CO	11/19/79	39,681	113,697					113,697		
Coastal	CO	01/11/80	9,000,000	9,000,000					9,000,000	1,000,000	$20,000
Conoco	CO	08/11/78	2,985,000	2,000,000					2,000,000	985,000	15,000
NGA Pet. 1/		08/11/78		Not Specified						40,000	10,000
Foremost Pet. 1/		08/11/78		Not Specified						45,000	5,000
Conoco	CO	03/12/79	972,463	972,463					972,463		
Conoco	CO	03/12/79	72,210	72,210					72,210		
Exxon	CO	10/05/78	292,691			292,691			292,691		
Exxon	CO	11/02/78	508,000	508,000					508,000		
Exxon	CO	01/25/79	3,980,000			3,980,000			3,980,000		
Exxon	CO	01/30/79	460,000			460,000			460,000		
Exxon	CO	07/18/79	208,328			208,328			208,328		
Exxon	CO	09/11/79	5,628,750			5,628,750			5,628,750		
Gulf	CO	07/26/78	42,240,000	42,240,000					42,240,000		
Gulf	CO	09/10/79	1,618,884	1,618,884					1,618,884	10,000	
Gulf	CO	11/21/79	11,738,252	10,543,220	1,195,032				11,738,252	100,000	
Marathon	CO	12/05/78	1,075,000			1,075,000			1,075,000		
Mobil	CO	09/04/79	13,746,388	2,236,166		11,510,222			13,746,388	50,000	

Table VI

Office of Special Counsel Settlements
As of January 31, 1980

Refiner	Document	Date	Total Alleged Violations 2/	REMEDY Refund to Customer	Price Rollback	Elim. of Price Inc.	Investment Commitments 3/	Other	Total	Civil Penalty	Criminal Fine
Phillips	CO	05/27/78	Not Specified	$977,891					$977,891		
Phillips	RO	12/15/78	Not Specified	8,863					8,863		
Sohio	CO	11/29/79	16,626,079			$16,626,079			16,626,079	$10,000	
Sohio	CO	01/15/80	568,653			251,744			251,744		
Texaco	CO	04/25/78	3,382,964	3,382,964					3,382,964	100,000	
Texaco	CO	06/08/78	2,101,584	2,101,584					2,101,584	75,000	
Texaco	CO	07/31/78	2,408,777	2,408,777					2,408,777		
Texaco	CO	01/25/79	18,226	18,226					18,226		
Union	CO	01/04/79	1,333,776			1,333,776			1,333,776	12,500	
Union	CO	07/23/79	2,413,517			2,413,517			2,413,517		
Union	CO	09/13/79	390,733	390,733					390,733		
TOTAL:			$765,618,232	$144,396,031	$21,195,032	$382,954,107	$122,000,000	$25,000,000	$695,545,170	$2,462,500	$50,000

1/ Although M&A Petroleum and Foremost Petroleum are not among the major refiners being audited by Special Counsel, they were parties to the Conoco consent order issued by Special Counsel on August 11, 1978.

2/ In certain instances, compliance problems encountered during the audit were settled without having been made the subject of an actual formal compliance action.

3/ Many remedies are in the process of being effected. We have established a system for monitoring individual comprehensive consent orders. The audit team has undertaken in the case of the four comprehensive settlements made to date a review of each specific provision of the consent order to determine the refiner's compliance with it. Reports as a result of these monitoring activities will be available by February 29, 1980.

Table VI

Q. 7(b) **Should not all of the overcharges go directly to the Treasury, except where the injured party is identified?**

A. **Directing refunds of all alleged overcharges to the U.S. Treasury does not necessarily constitute a feasible administrative remedy for the following reasons:**

(1) The major refiners have been extremely reluctant to agree to such Treasury payments because they doubt whether the Congress has authorized such form of payment as an acceptable method of remedying violations.

(2) The major refiners are fearful of payments to the Treasury because of uncertainty as to whether IRS might deem such payments as a penalty (not a business expense for tax purposes).

(3) Numerous companies are of the view that payments to the Treasury will not be available as a defense in private damage actions that may be brought pursuant to §210 of the Economic Stabilization Act (incorporated by reference into the EPAA).

Q. 8(a) The budget book (Vol. 7, p. 157) shows a request of over $10.6 million for the OSC major refiner program. Of this sum, over $4.9 million is earmarked for audit support. The explanation indicates a "turnkey" approach will be followed and that this contracting will continue well beyond the original limited period of two year promised by the DOE many months ago. When our Subcommittee reluctantly agreed to this contract effort, we did so on the basis that it would be a short-term effort. Now it appears that there is no end to the effort. We request a more detailed justification for this additional funding and for use of a turnkey approach.

A. The Department has directed the Special Counsel to conduct intensive audits of the major refiners to determine their compliance with the regulations implementating Congressional statutes enacted to administer petroleum shortage situations in this country. The Special Counsel concentrated during the past two years on the largest 15 of the 35 refiners auditing them for the 1973-1976 period. That goal has been achieved. The first two years of the intensified audit program resulted in the issuance of over 200 enforcement actions (over $10.1 billion) to the refiners; the preponderance of those actions were issued to the top 15 refiners for the improper pricing practices occurring during the 1973-1976 period. The remaining 20 refiners must be audited for the 1973-1976 period and all 35 refiners for the 1977-forward period.

The OSC mandate to complete the audit of 35 major refiners for just the period 1973-1976 was a large-scale manpower-intensive effort requiring over 3,000,000 manhours of effort over a period of two and one-half years. The alternatives were acquiring extensive contract audit assistance which provided the maximum in the way of

A to Q. 8(a) continued

flexibility and timely focus of audit resources or hiring an additional 265 employee auditors with the concommitant problems of recruiting, training and eventual out placement after completion of the peak workload.

The OSC has assessed its available manpower and found it to be insufficient to meet the expected workload in FY 1981. First, attorneys and auditors (416 staff years) must be developed to pursue litigation of an anticipated 200-400 separate enforcement actions involving several billions of dollars. Second, auditors, attorneys and computer personnel (263 staff years) will conduct 1980 and 1981 period audits of refiners to assess their current compliance with price controls. They will also monitor allocations of crude oil and petroleum products, and handle criminal investigations where appropriate. Finally, they will verify that the companies comply with the terms of consent agreements, administrative orders and court orders.

The OSC is requesting 612 full time permanent positions; the same number as in FY 1978, FY 1979 and FY 1980. Contract support has provided the necessary skills and manpower to meet peak workloads. Many of the audit sites are located in geographic areas where DOE had no audit workforce. Using Federal employees would require extensive relocations estimated to cost upwards of $7 million in travel and relocation funds. Contract resources provide the maximum flexibility in providing audit resources in locations where

A to Q. 8(a) continued

OSC personnel are not physically located. The contractor has also been able to provide specialized resources, e.g., chemical and petroleum engineering services necessary to support the audit function which are not available within OSC.

In FY 1981, $4.9 million (82 staff years) of contract effort will be required to supplement the OSC staff while completing all primary audit work. This is a significant reduction in contractor audit support from FY 1980. Contract assistance was chosen as the most cost effective and efficient way of providing these services. In this way OSC will be able to sustain the heavy litigation burden resulting from earlier enforcement actions while remaining current in the audits which are required to be performed.

The term "turnkey" audit indicates an audit where OSC staff performs supervision responsibility and the contractor performs most of the actual audit work. The contractor works under close supervision of the resident OSC audit team leader and a full time OSC auditor provides liaison with the contractor and with the company. In three instances, OSC has already requested the contractor to perform such turnkey audits. This approach will be limited to no more than five of the thirty-five audits for which OSC has responsibility.

Q. 8(b) The budget includes over $3 million for organizational and management systems studies and litigation support.

(i) Why must DOE hire a contractor to "survey the changes in the workload and professional skill mix requirements" for the future and to recommend future "assignments of functional responsibilities"?

(ii) The "litigation support" proposal appears very much akin to a paralegal program. It purports to include paralegal services. Why should the DOE enter into a contract to carry out such a program? Why not hire paralegals from local law schools? We also question the appropriateness of contracting for legal services. We would like to know it other agencies engage in such contracting.

A. The litigation support contract is designed to provide automated data retrieval and document classification in support of litigation. Paralegal capability type personnel may be needed in part to assist in building the information base, assisting with document searches, and supporting attorneys with development of certain evidentiary materials. Law school students may well be utilized by a contractor in the performance of certain activities. The OSC expects this work effort to be very intense initially, and then become reactive to court events and decisions. It seems prudent to utilize a contractor that can hire people at the geographic site of the work and for only the time required to accomplish specific tasks. The OSC, on the other hand, would be compelled to divert slots away from audit and litigative activities and to pay extensive relocation costs as the sites of these activities change.

A to Q. 8(b) continued

OSC is not aware of the practice of other agencies in connection with paralegal support. It is known that there are several computerized information systems that support litigation activities that are in operation at the Departments of Justice and Interior. Those systems are being evaluated for their compatibility with the character of OSC's litigation effort.

Q. 9 Please provide to us, as you did last year, a copy of all memoranda or other documents in any office of the DOE recommending to the reviewing Committee intervention in regulatory proceedings and state what was the result of each such request.

A. During the past year the Intervention Review Committee (IRC) considered the following proceedings.

1. FERC Proceedings

   (a) William Pipeline Co.
   (OR 79-1) (See Attachment A) IRC approved.

   (b) Central Power and Light, et al.,
   (El 79-8) (See Attachment B) IRC approved.

   (c) New England Power Company, (ER 80-66
   ER 80-67 and ER 80-68). (See Attachment C)
   IRC approved.

   (d) Public Service Company of New Hampshire
   (EL 78-15 and ER 78-339). (See Attachment D)
   No action taken.

   (e) Trailblazer Pipeline Company,
   Overthurst Pipeline Company, Colorado
   Interstate Gas Company (CD 79-80
   (See Attachment E) IRC disapproved.

A to Q. 9 continued

2. State Proceedings

(a) Los Angeles Department of Water and Power PURPA proceeding. (See Attachment F) IRC approved.

(b) Northern Pipeline Company's Application for Eminent Domain to Iowa Commerce Commission (p-749) (See Attachment G) IRC approved.

(c) Investigation of Construction Program of Commonwealth Edison Company by Illinois Commerce Commission (78-0646). (See Attachment H) IRC disapproved.

(d) Rate Increase Application of Arizona Public Service Company before the Arizona Corporation Commission (U-1345) (See Attachment I) IRC approved.

(e) Rate Increase Application of Public Service Company of New Mexico before the New Mexico Public Service Commission (See Attachment I) IRC approved.

(f) Generic PURPA Rate Proceeding of the Florida Public Service Commission (See Attachment I) IRC approved.

(g) PURPA Rate Design for Kansas City Power and Light Company before the Missouri Public Service Commission (EO-78-161) (See Attachment I) IRC approved.

(h) Rate Increase Application of Gulf States Utilities Co. before the Louisiana Public Service Commission (U-14495) (See Attachment I) IRC approved.

(i) Other PURPA related state proceedings considered but not approved by the IRC were in California, Indiana, Nebraska, New York, North Carolina, Ohio, Pennsylvania and Texas. (See Attachment I)

3. ICC Proceedings

(a) Chicago and Northwestern Transportation Co., (ICC 29066) (See Attachment J) IRC approved.

(b) Incentive Rates on Coal - Axial, Colorado to Coleto Creek, Texas (ICC 37226) (See Attachment K) IRC approved.

Mr. SHARP. Fine. If the others have statement, we would be happy to place them in the record and hear from you about those statements if we can.

Mr. COLEMAN. I have no written statement.

Mr. GOLDSTEIN. I have a statement, Mr. Chairman.

Mr. SHARP. You may summarize your written statement or highlight parts of it, whatever you wish.

I will have to break in a few minutes, we are in the midst of a vote on the House floor, but I think we will go as long as we can. Mr. Goldstein.

STATEMENT OF MELVIN GOLDSTEIN

Mr. GOLDSTEIN. As you know, the Office of Hearings and Appeals is generally responsible for analyzing and deciding requests for relief from the regulatory requirements of the Department of Energy. Those regulations include the allocation and pricing of crude oil and motor gasoline. In this regard, I would like to describe the problems which have confronted the Office of Hearings and Appeals in recent months, the measures we have taken to meet these difficulties, and the position which the Office occupies at the present time.

On February 1, 1979, the Office of Hearings and Appeals had 920 cases in inventory. Cases were being received during the November 1978 through February 1979 period at an average rate of 221 cases a month. On March 1, 1979, that situation changed dramatically. New allocation regulations went into effect and product shortages were beginning to have an impact on gasoline supplies. Later in the year substantial disparities and disruptions developed in crude oil markets.

This situation had a profound effect on the Office of Hearings and Appeals. During the March 1979 through December 1979 period cases were filed with the Office of Hearings and Appeals at an average rate of 2,100 cases a month. That average monthly case receipt figure is 10 times greater than comparable case receipt figures for the previous 4 months. The case inventory of the entire Office at the end of September stood at 10,031 cases. The February 1, 1979, inventory was 9 percent of that figure. Most of the new cases were submitted by retailers and resellers of motor gasoline seeking an increased allocation.

The fiscal year 1979 staffing level of the Office of Hearings and Appeals was based on the assumption that approximately 36 cases a week would be filed and that motor gasoline would be decontrolled. Instead during certain portions of fiscal year 1979 the Office of Hearings and Appeals received 161 cases a day.

Both the Congress and the administration responded to the extraordinary situation which the Office of Hearings and Appeals faced. As a result of the action of the Congress and the Office of Management and Budget, the staff ceilings of the Office of Hearings and Appeals were raised considerably in the summer of 1979 to deal with the mounting caseload. With these new resources we were able to develop a regional operation. In less than 3 months we established five regional centers. We now have in place a regional staff of 75 that includes attorneys, economists, and business analysts. Our headquarters staff has also been augmented.

That data indicates that as a result of the action taken by the Congress and the administration in the 1979 calendar year the Office of Hearings and Appeals was able to issue more than 15,000 determinations. [See p. 516.] In addition, Mr. Chairman, our regional centers which did not even exist at this time last year had organized their operations to such an extent that in December 1979 alone they issued 2,333 determinations.

In addition to achieving a very substantial increase in productivity, the Office of Hearings and Appeals has also adopted a number of other measures to expedite the consideration of the cases filed with us. First, we have streamlined our internal procedures to the maximum extent possible consistent with due process and the DOE procedural regulations. For example, we have convened hearings within a few days to consider particularly critical cases.

In many instances, the determination that relief is warranted is made during the course of the hearing and relief provided on the same day. In other cases, we have granted affirmative relief within a few days of receipt of an application through the issuance of a stay. Firms which have received this type of consideration range from the smallest gasoline retailers to large independent refiners and independent wholesalers serving a number of other independent suppliers. The Office of Hearings and Appeals has also wherever possible attempted to resolve in a single determination regulatory difficulties which a large number of firms are experiencing. In this regard, class exceptions have been issued providing very substantial relief to dealers and independent jobbers.

To further enchance the effectiveness of the exceptions process, we have developed a number of standard analytical frameworks which are used to analyze and resolve groups of petitions which share common fact patterns. In order to focus particular attention on small business applicants, we have also established an allocation task force that can respond to questions by members of the public. This group explains to applicants in detail the nature of the DOE allocation and price regulations, the remedies that might be utilized prior to seeking exception relief, and the procedures for filing an exception application.

In addition to each of these measures, the DOE Office of Congressional Affairs has established a liaison office whose responsibility it is to respond to congressional inquiries before the office.

With respect to substantive standards, we have published extensive guidelines discussing in considerable detail the criteria which we have applied in considering applications for exception from the motor gasoline allocation and pricing regulations. The first portion of the guidelines was signed on July 3, 1979. The remaining portion of the guidelines discusses in detail exceptions granted to wholesalers and jobbers and was issued this past Friday. That portion of the guidelines also discusses the principles which we apply in exception applications concerning gasohol. If the committee pleases, I would be glad to make a copy of those guidelines available to it.

We are pleased that our efforts have been effective. Each month since September our case determinations have exceeded case receipts and our inventory of open cases has dropped.

Despite all these measures we do recognize that a substantial inventory of cases still exists. We are committed to doing everything possible to reduce that inventory to manageable levels. In order to do so, we will continue a vigorous recruitment effort to reach our present staff ceiling. We will also continue to explore innovative approaches that will resolve the cases brought to us in a fair and effective manner.

[Testimony resumes on p. 522.]

[The following letter and attachments were received for the record:]

Department of Energy
Washington, D.C. 20461

APR 30 1980

Honorable John D. Dingell
Chairman, Subcommittee on Energy and Power
House Interstate and Foreign Commerce Committee
3217 House Annex No. 2
Washington, D. C. 20515

Dear Mr. Chairman:

On February 13, 1980 I testified before the Subcommittee on Energy and Power of the House Committee on Interstate and Foreign Commerce. As part of my prepared statement I presented certain caseload processing statistics for the Office of Hearings and Appeals.

Since the date of my testimony we have been striving to correct and update our data base. Those efforts have proven to be successful and I am now forwarding to you for your information revised caseload statistics as of April 10, 1980.

Please do not hesitate to let me know if you have any questions regarding this material.

Sincerely,

Melvin Goldstein
Director
Office of Hearings and Appeals

Enclosure

. April 10, 1980

TABLE I
INPUT/OUTPUT 1979

Total Office of Hearings and Appeals

Month	Beginning Inventory	Receipts	Final National Determinations	Proposed National Determinations	Regional Determinations	Total Determinations	Ending Inventory*
January	850	176	150	52	50	252	826
February	826	274	206	34	30	270	864
March	864	2,067	334	98	82	514	2,515
April	2,515	2,688	729	159	76	964	4,398
May	4,398	2,166	849	88	352	1,289	5,363
June	5,363	2,680	779	75	260	1,114	7,004
July	7,004	2,076	418	133	408	959	8,254
August	8,254	2,021	657	128	557	1,342	9,061
September	9,061	2,050	515	131	714	1,360	9,882
October	9,882	1,820	713	152	1,196	2,061	9,793
November	9,793	1,618	554	282	1,807	2,643	9,050
December	9,050	2,130	361	295	2,439	3,095	8,380
TOTAL (1979)		21,766	6,265	1,627	7,971	15,863	

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*Includes cases originating in the Headquarters component for which Proposed Decision and Orders have been issued but not yet finalized.

TABLE I
INPUT/OUTPUT 1980

Total Office of Hearings and Appeals

Month	Beginning Inventory	Receipts	Final National Determinations	Proposed National Determinations	Regional Determinations	Total Determinations	Ending Inventory*
January	8,380	1,936	436	104	1,739	2,279	8,141
February	8,141	1,795	768	90	1,333	2,191	7,835
March	7,835	1,414	676	150	1,375	2,201	7,198
TOTAL (1980)		5,145	1,880	344	4,447	6,671	

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*Includes cases originating in the Headquarters component for which Proposed Decision and Orders have been issued but not yet finalized.

TABLE II
INPUT/OUTPUT 1979

Headquarters Office of Hearings and Appeals

Month	Beginning Inventory	Receipts*	Final Decisions and Orders	Proposed Decisions and Orders	Administrative Closings**	Total Determinations	Ending Inventory***
January	802	115	117	52	33	202	767
February	767	202	152	34	54	240	763
March	763	1,755	233	98	101	432	2,184
April	2,184	1,858	326	159	403	888	3,313
May	3,313	1,322	167	88	682	937	3,786
June	3,786	957	389	75	390	854	3,964
July	3,964	941	186	133	232	551	4,487
August	4,487	515	225	128	432	785	4,345
September	4,345	397	188	131	327	646	4,227
October	4,227	414	213	152	500	865	3,928
November	3,928	366	316	282	238	836	3,740
December	3,740	665	211	295	150	656	4,044
TOTAL (1979)		9,507	2,723	1,627	3,542	8,054	

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*Excludes cases sent to Regions.

**Excludes cases sent to Regions.

***Includes cases for which Proposed Decisions and Orders have been issued but not yet finalized.

TABLE II
INPUT/OUTPUT 1980

Headquarters Office of Hearings and Appeals

Month	Beginning Inventory	Receipts*	Final Decisions and Orders	Proposed Decisions and Orders	Adminis-trative Closings**	Total Determina-tions	Ending Inventory***
January	4,044	478	246	104	190	540	4,086
February	4,086	428	646	90	122	858	3,746
March	3,746	227	360	150	316	826	3,297
TOTAL (1980)		1,133	1,252	344	628	2,224	

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*Excludes cases sent to Regions.
**Excludes cases sent to Regions.
***Includes cases for which Proposed Decisions and Orders have been issued but not yet finalized.

TABLE III
INPUT/OUTPUT 1979

Regional Office of Hearings and Appeals

Month	Beginning Inventory	Receipts	Final Decisions and Orders *	Proposed Decisions and Orders	Administrative Closings**	Total Determinations	Ending Inventory
January	48	61	4	5	41	50	59
February	59	72	4	3	23	30	101
March	101	312	12	2	68	82	331
April	331	830	15	23	38	76	1,085
May	1.085	844	13	15	324	352	1,577
June	1,577	1,723	32	61	167	260	3,040
July	3,040	1,135	76	101	231	408	3,767
August	3,767	1,506	37	153	367	557	4,716
September	4,716	1,653	41	176	497	714	5,655
October	5,655	1,406	187	368	641	1,196	5,865
November	5,865	1,252	142	694	971	1,807	5,310
December	5,310	1,465	328	1,260	851	2,439	4,336
TOTAL (1979)		12,259	891	2,861	4,219	7,971	

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*Excludes finalization of Proposed Exception Decisions and Orders.

**Includes cases sent to Headquarters and other Regions.

TABLE III
INPUT/OUTPUT 1980

Regional Office of Hearings and Appeals

Month	Beginning Inventory	Receipts	Final Decisions and Orders *	Proposed Decisions and Orders	Administrative Closings**	Total Determinations	Ending Inventory
January	4,336	1,458	464	777	498	1,739	4,055
February	4,055	1,367	287	663	383	1,333	4,089
March	4,089	1,187	327	663	385	1,375	3,901
TOTAL (1980)		4,012	1,078	2,103	1,266	4,447	

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*Excludes finalization of Proposed Exception Decisions and Orders.

**Includes cases sent to Headquarters and other Regions.

Mr. **Sharp**. Mr. Coleman.

Mr. **Coleman**. I do not have a statement.

Mr. **Sharp**. Mr. Bloom.

Mr. **Bloom**. I do not have a written statement. I would like to make a brief oral statement.

Mr. **Sharp**. Certainly.

STATEMENT OF PAUL BLOOM

Mr. **Bloom**. As you know, Mr. Chairman, in the first week of December 1977, my office, the Office of Special Counsel, for compliance within ERA was activated for the purpose of completing the embargo period, 1973 through 1976, comprehensive audits under our refinery pricing and allocation regulations for the 35 largest refiners with particular instruction that by the second anniversary of that activation by the end of December 1979, we were instructed to complete the embargo period audits for these 15 largest refiners and to take appropriate enforcement actions consistent with the audit results. We also had associated responsibility over special investigations, negotiation of consent orders, and contemporaneous allocation problems as necessary during that period.

I am glad to be able to report that that first priority assignment directed to us by Secretary Schlesinger in 1977 was completed in December 1979. By that second anniversary the office had issued approximately 238, at last count, formal published enforcement actions ranging from complaints filed in Federal court to much more informal actions in the nature of notices of probable violation. The total of identified dollar pricing violations—not necessarily overcharges, Mr. Chairman, but the simple arithmetic total of violations asserted in those 238 actions was slightly over $10 billion. Obviously, any amount of overcharges is perhaps substantially less than that because of the complexity of the regulations.

During that period it also became clear that we would require increasing legal support for what was not intended as such but what became of necessity one of the largest legal enforcement offensive I think the Executive agency has undertaken in so brief a period. So increasingly we rely on the recruitment of lawyers and, of course, the continued strong support we are glad to have had from the Office of General Counsel and from the DOE and Department of Justice.

The consent orders, as I mentioned earlier, have attracted certain publicity in recent months. Mr. Chairman, they are by their nature controversial and something of a programmatic difficulty for a person such as myself charged with the administration of an audit in the enforcement program.

They represent a series of judgments on my part with the concurrence of Mrs. Rollins, and before her Mr. Bardin and senior officers of the Department to the effect that in some sets of circumstances it is appropriately in the public interest to settle enforcement claims against major refiners on a compromise basis with appropriate forms of remedy which are designed and hopefully intelligently tailored to compensate the communities portions of the American consuming public ranging from wholesale purchases to retail consumers, that had been injured by overcharges during the period of the audit.

Those consent orders have an arithmetic total value excluding the investment credits of approximately $600 million. That consists of bank eliminations, refunds, credit memoranda, price reductions and rollbacks. In addition to the completion of the base period audit through 1976 with the largest 15 refiners and the completion of 4 global consent order settlements with major refiners, of which 3 are in the largest 15 refiners in our order of priorities, we have also undertaken in 1979 a major allocation audit on a contemporaneous basis concurrent with the happening of the widely noticed gasoline shortage and the resulting gasoline lines. This had a very serious effect on consumers and diverted very significant resources. Notwithstanding our priority we expended 15,000 hours of contemporaneous audit time trying to get on top of that.

We issued 7 IROC's but we had to intervene in literally hundreds of disputes based on supplier-purchaser relationships. We also had to assist in the enforcement of orders from Mr. Goldstein's office which has diverted a substantial part of our resources this summer. That allocation audit is not yet completed in the sense of certain elements of it which involve a very sophisticated judgment of multinational corporations and involve reflection on some of their most sensitive positions taken last spring and last summer, ranging from crude oil imports and production, refinery schedules, production slates and releases of products from stock. In the aggregate this represents extremely difficult problems under our allocation regulations and we have by no means completed our evaluation of those very complex questions.

That is all I have.

Mr. Moffett [presiding]. Thank you, Mr. Bloom.

Thank you all for your statements.

At this time, without objection, I would like to introduce into the record from the hearing yesterday of the Government Operations Subcommittee which I chair the testimony of Ms. Rollins, the testimony of the consumer groups, the Consumer Energy Council of America, the Citizen/Labor Energy Coalition and the GAO testimony relating to their report which criticizes the DOE, as well as letters citing lack of competition in the industry and the serious impact on the continuing viability of small marketers.

[Testimony resumes on p. 619.]

[The material referred to follows:]

ENERGY
UNLIMITED, INC.

50 Harvard Street
New Britain, CT 06051
(203) 223-2717

February 1, 1980

The Honorable Toby Moffett
Chairman, Subcommittee on
Environment, Energy and
Natural Resources
B 371 Rayburn House Office Bldg.
Washington, DC 20515

Dear Toby:

At a recent FOMAC meeting there was discussion concerning serious questions in the upper levels of the DOE regarding the current levels of profit accruing to the wholesale and independent marketing sectors of the heating oil industry. Upon my return to Connecticut, I was attracted to a newspaper article concerning your investigation of the enormous profits being shown by the refiners and that you were going to hold a hearing to attempt to understand how the government should respond to these profits.

It would seem to me that any hearing into the profits of the refiners would not be complete without also understanding the profit picture of the wholesaler and the retailer so that all three would be treated in the same context. Both you and I have a new responsibility to the users of fuel oil who will soon be paying well in excess of $1/gallon. These people have a right to be assured that they are not being "ripped off" by the refiners, wholesalers, and the marketers.

To that end I would reaffirm my position previously expressed to you that fairness, intelligence, honesty, and good common sense dictate the governmental control of prices and allocations of home heating oil.

As you know, we, the marketers, are firmly controlled by our suppliers--we are "locked in". We know that we have no alternative to our current suppliers. If we don't do exactly as they say and pay to them the prices that they arbitrarily charge irrespective of competition that they might have, we will not be able to go into the market place and buy oil. So you see, on the wholesale level we already have a totally controlled market -- controlled as a cartel controls. This results in the marketing segment being controlled in their buying end and having no controls on the selling end which is resulting in the independent marketing sector slowly committing business suicide since the retail selling price has gotten so high that many people simply don't have the nerve to charge their friends and customers the price that good economics dictates.

Because of this I foresee the economic upheaval in the marketing segment of the heating oil industry which could have a seriously debilitating effect on many of the Northeast and other oil using areas.

I would, therefore, respectfully recommend that you address that entire subject as expeditiously as possible. At your convenience, I would like to explore this problem in much greater depth.

Sincerely,

ENERGY UNLIMITED, INC.

Sidney H. Berson
President

SHB:pdl

ngjc
National Oil Jobbers Council
1707 H Street, N.W., 11th Floor
Washington, D.C. 20006 · 202/331-1198

February 8, 1980

Representing
Member
Associations in:

Alabama
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
District of
Columbia
Florida
Georgia
Idaho
Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Montana
Nebraska
Nevada
New Hampshire
New Jersey
New Mexico
New York
North Carolina
North Dakota
Ohio
Oklahoma
Oregon
Pennsylvania
Rhode Island
South Carolina
Tennessee
Texas
Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming

[illegible] Affiliates
[illegible]
[illegible] States

Toby Moffett, Chairman
Committee on Governmental Operations
Subcommittee on Environment, Energy and Natural Resources
Room 371B Rayburn House Office Building
Washington, D.C 20515

Comments: Home Heating Oil

Dear Mr. Chairman:

On behalf of the National Oil Jobbers Council (NOJC), I wish to express my appreciation to you and your staff for the opportunity to explain some of the problems confronting small, independent heating oil distributors. The NOJC is a federation of 44 state and regional trade associations (see Attachment I) which represent approximately 15,000 independent petroleum products marketers. Nearly half of these marketers service residential home heating oil accounts. Federated members of NOJC include such regional voices for home heating oil distributors as the New England Fuel Institute, the Independent Connecticut Petroleum Association, the Better Home Heat Council of Massachusetts, Fuel Merchants Association of New Jersey, the Northwest Petroleum Association and the Indiana Oil Marketers Association.

From conversations with your staff, it appears that the subcommittee's principal concern is why heating oil prices continue to rise in a market where supply seems to be more than adequate. While NOJC is not in a position to address the broader question of refiner price increases and the degree to which these increases reflect rising OPEC prices, we can address many of the competitive problems facing small heating oil dealers which limit these dealers' ability to exert upward competitive pressures on their refiner-suppliers.

NOJC has for some time been very concerned with refiner allocation fractions. During the course of the summer our members complained frequently that their suppliers were not providing adequate supplies to build summer stocks at the secondary and tertiary levels. A subsequent study by NOJC showed these stocks to be at dangerously low levels. The excuse given by suppliers for placing marketers on allocation fractions as low as 50 percent was the need to build primary distillate stocks to the 240 million barrel level by October 31 as requested by President Carter.

Yet a study released by DOE's Energy Information Administration in early fall showed that refiners in total sold as much middle distillate during the four month period May to August of 1979 as they had in the same four month period of 1978. Who did they sell it to? Thus far, despite direct congressional inquiries, no answer to this question has been received from DOE.

A Federation of Independent Petroleum Marketers Founded in 1941
Merged with the National Oil Fuel Institute in 1974.

I cite this "ancient" history to explain the first reason why marketers have been unable to take advantage of the supply situation to force down refiner prices. These marketers in many cases are still on allocation fractions. Attached is a list of allocation fractions by major distillate suppliers. (Attachment II) You will note that Amoco, Fina and Delta are on an 85 percent fraction. Chevron and Skelly are on a 90 percent fraction. (Although the list says Gulf does not allocate distillates, a Gulf marketer advises us he is on a 90 percent allocation fraction also.) Only seven of the twenty-one companies listed are on a 100 percent allocation fraction. Because of these fractions it is difficult for a marketer to switch suppliers, even though there exists substantial price differentials among suppliers.

Even assuming that suppliers were not allocating product, many marketers would still be hesitant to switch suppliers due to contractual security. Horror stories abound in the heating oil industry of marketers who switched suppliers because the new supplier was a few cents cheaper per gallon only to see that supplier vanish when another shortage occurred. The old supplier is then generally unwilling to replace the gallons the marketer purchased from someone else, thus leaving the distributor basically without a supplier. Therefore, marketers are understandably cautious about switching suppliers, even if they could. This reluctance to switch by a distributor is a common phenomenon after most shortages.

There are many other problems facing small heating oil dealers which threaten their competitive viability. Foremost among these are tighter and tighter credit terms. Traditional payment patterns have been altered substantially. Prompt payment discounts have been eliminated in many cases. Lines of credit have not kept pace with the rising price of products. Interest rates have escalated to the point that most marketers must pay in excess of 15 3/4 percent to borrow money to finance inventory and accounts receivables. In some cases these very real increased costs are added on to the price of product. In other cases the direct competitive pressures the marketer faces limit his ability to pass through these costs and remain competitive with other dealers in his market area. Unfortunately, these direct price increases are not as visible to either the consumer or the Congress and most commonly are reflected in the marketer's gross margin.

I hope Mr. Chairman you find this information useful for your hearings. If NOJC can be of further assistance, please call.

Respectfully,

Phillip R. Chisholm
Director of Legislative Affairs

PRC/lsr

Attachments

Attachment I

NOJC represents these member associations:

Alabama Petroleum Marketers Association
Arizona Oil Marketers Association
Arkansas Oil Marketers Association
California Independent Oil Marketers Association
Colorado Petroleum Marketers Association
Independent Connecticut Petroleum Association
Petroleum Association of Delaware
Oil Heat Institute of Greater Washington (DC)
Florida Petroleum Marketers Association
Georgia Oilmen's Association
Illinois Petroleum Marketers Association
Indiana Oil Marketers Association
Intermountain Oil Marketers Association
Iowa Independent Oil Jobbers
Kansas Oil Marketers Association
Kentucky Petroleum Marketers Association
Louisiana Oil Marketers Association
Maine Oil Dealers Association
Petroleum Council of Maryland
Better Home Heat Council of Massachusetts
Michigan Petroleum Association
Mississippi Oil Jobbers Association
Missouri Oil Jobbers Association
Nebraska Petroleum Marketers, Inc.
Independent Oil Men's Association of New England
New England Fuel Institute
Better Home Heat Council of New Hampshire
Fuel Merchants Association of New Jersey
New Mexico Petroleum Marketers Association
Empire State Petroleum Association, Inc.
North Carolina Oil Jobbers Association
Northwest Petroleum Association
Ohio Petroleum Marketers Association, Inc.
Oklahoma Oil Marketers Association
Oregon Oil Jobbers
Pennsylvania Petroleum Association
South Carolina Oil Jobbers Association
Tennessee Oil Marketers Association
The Texas Oil Marketers Association
Virginia Petroleum Association
Washington Oil Marketers Association
West Virginia Oil Jobbers-Distributors Association
Oil Jobbers of Wisconsin, Inc.
Wyoming Petroleum Marketers Association

National Oil Jobbers Council
1707 H Street, NW
Washington, D.C. 20006
(202) 331-1198

Attachment II

DISTILLATE FRACTIONS

February 1, 1980

COMPANY	%
Amoco	85
Ashland	96
Champlain	100
Chevron	90 (NE)
CITGO	96
Crown	100
Delta	85
Exxon	96
Fina	85
Getty	100
Kerr-McGee	70
LaGloria	85
Mobil	100
Rock Island	100
Shamrock	80
Shell	95 (E) 85 (W)
Ancortes	95
Skelly	90
Sun	96
Tenneco	100
Vickers	100

Note: Other companies - Gulf, Marathon, etc. - do not allocate for distillate.

Source: Oil Week

STATEMENT OF

HAZEL R. ROLLINS

ADMINISTRATOR

ECONOMIC REGULATORY ADMINISTRATION

DEPARTMENT OF ENERGY

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENT, ENERGY AND NATURAL RESOURCES

COMMITTEE ON GOVERNMENT OPERATIONS

U.S. HOUSE OF REPRESENTATIVES

FEBRUARY 12, 1980

MR. Chairman and Members of The Subcommittee:

I am pleased to have this opportunity to discuss the current middle distillate situation and respond to the important questions raised in your January 31, 1980 invitation to appear before this Committee.

Prior to addressing those concerns, I would like to briefly review the statutory responsibilities as Administrator of the ERA and summarize the current middle distillate price and supply situation.

REVIEW OF RESPONSIBILITIES

The Emergency Petroleum Allocation Act of 1973, as amended (EPAA), provides the Department discretionary authority to reimpose price controls upon a deregulated product such as home heating oil. This authority may be exercised upon a finding that such action is necessary to attain, and is consistent with, the objectives specified in Section 4(b)(1) of the EPAA. The scope of these objectives is broad, and includes the protection of public health, safety and welfare; the maintenance of all public services; the maintenance of agricultural operations; the equitableness of price and the preservation of an economically sound and competitive petroleum industry.

One of the principal responsibilities under the statute is to balance the conflicts inherent in the Nation's need to have adequate production and supplies of middle distillates at reasonable prices.

CURRENT SUPPLY SITUATION

This winter has been marked by world events which have once again demonstrated the vulnerability of our nation to a sudden cutoff in oil supplies. Fortunately, it has been an unusually mild winter; through February 3, 1980, it has been 9.5 percent warmer than last winter and 4.5 percent warmer than the historical average. Primary stocks of middle distillates were approximately 211 million barrels as of February 1, 1980, a very comfortable level. Last year at this time stock levels were at 176 million barrels. Primary distillate stocks in key sections of the nation are also well above historical levels.

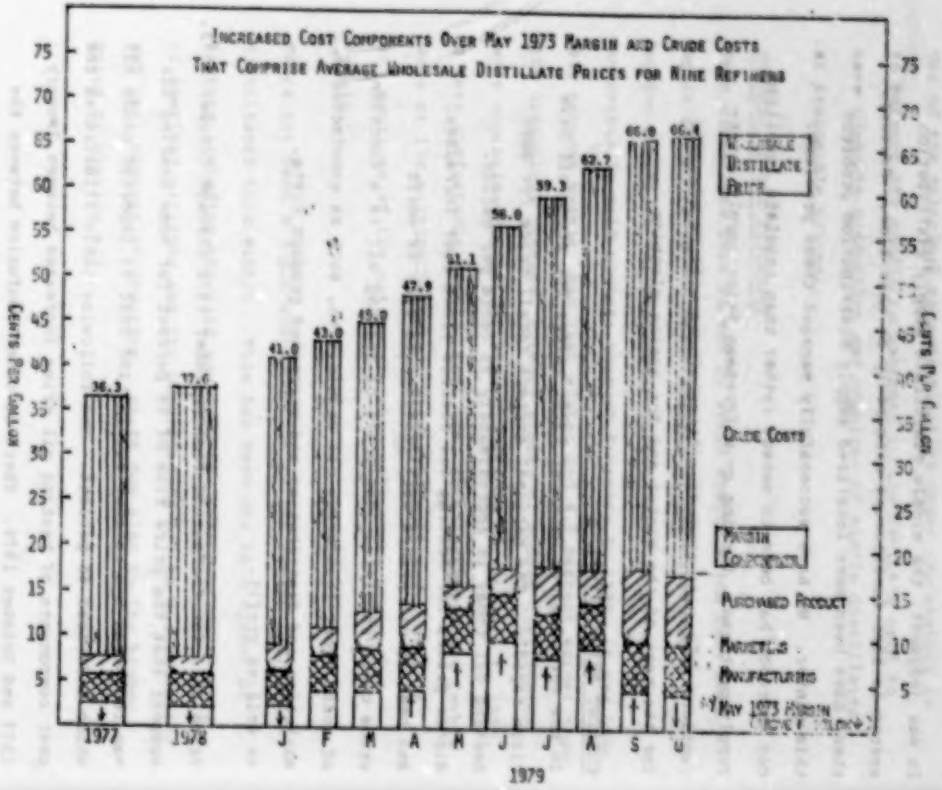
There has been a 7 percent reduction in the demand for middle distillates this winter. This has been due to a number of factors including the mild weather, the conservation efforts of American citizens and the Department's oil to gas switching and coal conversion programs. It is due also to the higher price of heating oil.

In our judgment, the middle distillate supply distribution system is also functioning adequately at this time. However, there have been some localized supply distribution problems this winter. We have successfully managed these problems. Our approach has been to manage rather than regulate localized supply problems. Barring an unforeseen major supply interruption, we expect that distillate stocks will be adequate for the rest of the winter and for spring planting.

CURRENT PRICE SITUATION

In the period since December 1978, prices for crude oil have risen rapidly. The national average retail price for home heating oil today is approximately 92 cents per gallon. Higher prices for heating oil reflect crude cost increases, and heating oil prices will continue to rise as world crude costs escalate. The price of heating oil is a function of costs other than crude oil acquisition, such as manufacturing, marketing and distribution and purchased product costs, as well as profit.

Price data for the period from December 1978 through October 1979, suggest that the price rise of 56 percent for home heating oil was less than the refiner acquisition cost of imported crude oil which increased 68 percent. The following table illustrates the cost components of heating oil price increases between January 1977 and October 1979. There is often confusion between the terms gross margin and profit margin. Gross margins are the difference between distillate prices and crude costs. Profit margins are like difference between total revenues and total costs.



Increased Cost Components Over May 1973 Margin and Crude Costs That Comprise Average Wholesale Distillate Prices for Nine Refiners

During the 40 months from decontrol to October 1979, distillate prices of the nine large refiners increased on an average of 35 cents per gallon with over 26 cents per gallon of that increase occurring since December 1978. Crude oil costs accounted for 24 cents per gallon of the 35 cents price increase.

While this table focuses on refiner margins, it should also be noted that wholesalers and retailers have also increased their gross margins substantially since decontrol. Our data show that the margins for wholesalers increased from 1.5 cents per gallon in June 1977 to 2.5 cents per gallon in October 1979. Likewise, retail margins increased from approximately 9.7 cents per gallon in June 1977 to 14.8 cents per gallon in October 1979.

It should be noted that costs for all firms in the petroleum market have increased, primarily as a result of the cost of financing higher priced distillates and the general tightening of credit.

I would now like to address the concerns expressed by the Chairman in his letter of invitation.

DOE'S EFFORTS TO ASSURE EQUITABLE PRICES FOR MIDDLE DISTILLATES

Since the decontrol of middle distillates, we have implemented various programs to monitor middle distillate prices and assess whether prices have been equitable. These efforts have been conducted by the Economic Regulatory Administration, both before and after the decision and recommendation on home heating oil by the Department's Office of Hearings and Appeals.

In the past year, ERA conducted two studies examining the costs and revenues of nine major refiners of No. 2 heating oil. We updated the study on the same issue covering the period from decontrol through October 1979. We will continue to monitor home heating oil prices.

We recognize the efforts of Congress to assist disadvantaged people suffering from escalating fuel prices. The Administration's efforts have also been directed at providing assistance to those least able to pay for nondiscretionary fuels as well as reducing demand for crude oil and petroleum products.

In the case of home heating oil, we took steps to increase available supplies to a stock level sufficient to protect against a colder than normal winter. We believe that adequate supplies provide the best protection against unwarranted prices increases. We have also worked with the Fuel Oil Marketing Advisory Committee, the Community Services Administration, the Department of Health, Education, and Welfare, and the Congress in implementing an energy assistance program. I believe this Administration has made significant progress in ensuring the availability of home heating oil for this winter and provided assistance to those on low and fixed incomes, those most heavily impacted by rising prices.

With respect to criteria to be used in determining at what price level Federal action may be required, we believe that margin controls, trigger prices or index prices have limited usefulness. Because of the broad, sometimes competing objectives of the EPAA, it would be inappropriate to establish any automatic mechanism which references only one of those objectives. Some, including the Department of Justice, have also expressed the concern that trigger prices may have an anticompetitive influence.

DOE'S EFFORTS TO ASSURE COMPETITION IN THE MARKETING OF MIDDLE DISTILLATES

ERA initiated a Middle Distillate Market Profile Report in July 1979. The report is an analysis of the competitive viability of fuel oil marketers. Although the report was not designed to analyze the degree of competition as to specific components of that market, it concludes that activities in all three distribution levels of the heating oil market have not jeopardized the competitive viability of marketers.

We recognize, however, that some small independent refiners may not have access to reasonably priced crude, and, therefore, may have difficulty in remaining competitive without Federal action. In response to this concern, the DOE has established an Emergency Crude Oil Allocation Program for the purpose of allocating crude oil to these refiners, taking into account price considerations. DOE also issued a Notice of Proposed Rulemaking on the Activation of the Standby Mandatory Crude Oil Allocation Program. The proposed amendments if adopted would permit additional flexibility in allocating crude oil under the Buy/Sell Program.

DOE'S THINKING CONCERNING THE ADVISABILITY OF REIMPOSING THE MIDDLE DISTILLATE PRICE AND ALLOCATION CONTROLS

The Chairman has asked for DOE's thinking concerning the advisability of reimposing price and allocation controls. In my judgment, reimposition of controls is inadvisable at this time. Price and allocation controls do nothing to increase supplies or reduce demand and can, in fact, be counterproductive to achieving such objectives. Controls will not force the industry to make the necessary efforts to obtain additional supplies. Price and allocation controls could restrict industry's ability and willingness to expeditiously provide supplies to the parts of the Nation where shortages may occur. Price and allocation controls are not necessarily a deterrent to price escalation. Therefore, we believe that our best strategy is to continue our efforts to assure adequate supplies, monitor market conditions, encourage conservation and assist those most heavily impacted by increasing energy costs.

Mr. Chairman, this concludes my prepared remarks. I will be happy to answer any questions you or the Subcommittee members have.

UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

FOR RELEASE ON DELIVERY
Expected at 9:30 a.m.
Tuesday, February 12, 1980

STATEMENT OF
F. KEVIN BOLAND
ASSOCIATE DIRECTOR, ENERGY AND MINERALS DIVISION
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENT, ENERGY, AND NATURAL RESOURCES
HOUSE COMMITTEE ON GOVERNMENT OPERATIONS
ON
THE DEPARTMENT OF ENERGY'S RESPONSE TO THE
RISING PRICE OF HOME HEATING OIL

Mr. Chairman and Members of the Subcommittee:

We welcome the opportunity to be here to discuss the findings in our recent report, "Washington, D.C., Area Home Heating Oil Supplies Adequate but at Escalating Prices" (EMD-80-42, January 22, 1980), which we prepared at the request of Senator John Warner. While the report focuses on the Washington, D.C., area heating oil market, the issues discussed in the report concerning rising heating oil prices and the Department of Energy's (DOE's) response to them are national in scope and are not limited to any particular geographic area. I will emphasize these issues in my testimony.

ESCALATING HOME HEATING OIL PRICES

Nationally, the average residential selling price for heating oil increased 111 percent between July 1976, when heating oil prices were decontrolled, and last August. Most of this increase occurred since January 1979. I should note that according to DOE figures, the price, as of November 1979, had increased to 83.7 cents a gallon, a 55-percent increase since January 1979. We are concerned that DOE, however, has done little to determine the reasons for, and the equitableness of, the price increases.

By August 1979, the latest period for which data was available when our report was prepared, the national average retail price of heating oil had risen to 77.2 cents a gallon--40.6 cents above the July 1976 price of 36.6 cents.

The prices refiners charge are reflected in these escalating retail prices and account for most of the increases. Between July 1976 and July 1979, refiners' heating oil selling prices had increased about 31 cents a gallon. The rising cost of crude oil helps to explain some of this increase--about 18 cents is due to increased crude oil costs. The resulting gross margin, however, (the difference between their cost of crude oil and their selling price for a refined product) of almost 13 cents a gallon represents a 233-percent increase. From the gross margin, refiners must pay the costs of purchased petroleum products, refining, marketing, and other costs of doing business. Any amount remaining after deducting such costs would reflect increased profits.

Although we did not attempt to determine profits, we did note an unusual increase in gross margins during the first 7 months of 1979. While refiners increased their gross margins by an average of only 2 cents a gallon during the first 2-1/2 years following decontrol, they increased these margins by about 8.6 cents a gallon during the first 7 months of 1979. During these 7 months, the refiners' selling price for heating oil increased 21.6 cents, while their crude oil costs increased 13 cents a gallon.

REASONS FOR INCREASED PRICES

The refiners' price increases have been a source of much controversy, which has not yet been resolved. DOE's attempts to do so have been limited and inadequate. Refiners contend that the increases are justified and are necessary to assure adequate petroleum supplies. Others, however, believe that the increases are unreasonable and are an unfair burden on consumers.

Refiners argue that there are several reasons for the higher prices and margins in addition to higher crude oil costs. They say that as a result of reduced refinery operations in 1979, caused by the shortfall in crude oil supplies earlier in 1979, fixed costs must be divided among fewer gallons produced. They also say that some refiners have had to purchase heating oil on the spot market at very high prices in order to supplement their own production, and that higher prices and margins are necessary in order for refiners to make needed investments in expanding and upgrading refining facilities.

Others contend that the prices have increased much faster than costs. In November 1978, DOE's Office of Hearings and Appeals said that refiners' prices had increased at a greater rate than their associated costs and that this situation was likely to continue in the future. The Congressional Research Service reached a similar conclusion in their October 1979 analysis.

DOE'S INATTENTION TO RAPIDLY ESCALATING HEATING OIL PRICES

The Congress, in its deliberations on the Federal Energy Administration's (FEA's) proposed amendments to remove price and allocation controls from No. 2 distillates, 1/ expressed concern that heating oil prices would rapidly increase after decontrol. The Acting FEA Administrator testified that between July 1976 and 1978, heating oil prices were expected to rise about 4 cents a gallon, even if controls were continued, and that FEA found no reason to expect any increase in the price over and above that expected under continued price and allocation controls.

He committed FEA to a program of monitoring distillate prices from September 1, 1976, through March 31, 1977, to insure that heating oil price increases would be necessary and reasonable. FEA did monitor prices and found that by January 1978, however, the price had risen to 48.5 cents a gallon, an increase of 11.9 cents--almost triple FEA's expected increase. FEA decided, however, that the increases were not so high as to justify reimposing price controls.

In August the Office of Hearings and Appeals held hearings on heating oil prices and estimated that from July 1976 through April 1978, refiners' wholesale prices for heating oil were $193 million in excess of what could have been charged under continued regulations. The difference amounted to 0.4 cent for every gallon

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1/Heating oil accounts for about 65 percent of No. 2 distillate, with diesel fuel making up the remaining 35 percent.

of heating oil sold during this period. Although the Energy Regulatory Administration (ERA) agreed with the Office of Hearings and Appeals estimate, it argued that heating oil prices had not increased sufficiently to warrant the reimposition of price or allocation controls.

In its report on the hearings, the Office of Hearings and Appeals also said that there were significant doubts that workable competition existed in the refinery sector of the industry and recommended that ERA complete a series of studies by September 1, 1979, on the subject. At the hearing, the Department of Justice participant recommended that competition questions be addressed by his Department. However, the Office of Hearings and Appeals was not convinced that this recommendation could provide short-term relief from noncompetitive conditions that might exist in the heating oil industry.

The Office of Hearings and Appeals further recommended that if heating oil price increases at the refinery level continued to exceed increased costs and if the ERA studies indicated the absence of workable competition, ERA should conduct formal rulemaking proceedings to determine the nature and extent of the price control program that should be reimposed.

ERA, however, has not implemented the recommended series of studies. ERA officials told us that they do not believe the issue of competition among refiners of heating oil is their agency's responsibility, but rather a matter solely for the Federal Trade Commission or Department of Justice to deal with. We disagree. As support for the decontrol of middle distillates in July 1976, FEA concluded that competition and market forces in the industry were adequate to prevent consumers from being charged inequitable prices for middle distillates. We believe that DOE should address these same aspects at times such as these, when heating oil prices are rapidly escalating.

DOE has not reviewed the issue of the equitableness of heating oil prices since the end of the 1977-78 heating season. We met with senior level officials in ERA and the Office of Policy and Evaluation to inquire into actions DOE had taken or should take to investigate escalating heating oil prices. We found little had been done and that DOE was not on top of the situation. This in itself was not good news, but the officials' opposing views regarding who was responsible for dealing with the price increases were even more disconcerting to us. Each office pointed to others as having the principal responsibility.

ERA officials told us it is not their responsibility, since their agency is only responsible for implementing regulatory policy. On the other hand, officials in the Office of Policy and Evaluation told us that it is ERA's responsibility to alert DOE management when there is need for a Federal response to price increases.

We attempted to clarify this issue of responsibility. On December 4, 1979, we wrote a letter to DOE presenting the issues we had developed in our review. We requested that DOE give us their official position on these issues by December 12, 1979, either in writing or by meeting with us. We had hoped that by now, DOE would have responded. However, we have not yet received any response from them on either our letter or our report.

We recognize heating oil is not under allocation or price controls and, therefore, should not be subjected to the same amount of attention as a controlled product such as gasoline. Even so, we believe that DOE has a responsibility to the Congress and the public to analyze situations such as the recent escalation of heating oil prices and, if necessary, take appropriate action. Both the Department of Energy Organization Act and the Federal Energy Administration Act of 1974, for which DOE now has responsibility, aim to insure fair and reasonable consumer prices for energy supplies. We believe that DOE has failed to take even the first steps necessary to insure that this objective is met, since it has not paid enough attention to the rapidly escalating heating oil prices.

Accordingly, we recommended in our report that the Secretary of Energy determine whether current heating oil prices are equitable and justified by increased costs and, if not, whether Federal action is needed. We also recommended that DOE prepare the study assessing the competitiveness of the refinery sector of the heating oil industry as recommended by the Office of Hearings and Appeals.

In summary, our review revealed that:

--The increased price of heating oil has sparked much debate and has significantly exceeded FEA's predictions at the time of decontrol in July 1976.

--Even though these increases were highlighted by the Office of Hearings and Appeals, ERA has not acted on their recommendations.

--DOE does not appear to be on top of the heating oil situation and is not in a position to say whether current heating oil prices are equitable.

Mr. Chairman, this concludes my prepared statement. I will be happy to respond to your questions.

citizen/labor energy coalition

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STATEMENT OF ROBERT M. BRANDON

WASHINGTON DIRECTOR

THE CITIZEN/LABOR ENERGY COALITION

BEFORE

THE ENERGY, ENVIRONMENT, AND NATURAL

RESOURCES SUBCOMMITTEE

February 12, 1980

My name is Robert M. Brandon. I am the Washington Director of the Citizen/Labor Energy Coalition. The Coalition is made up of over 200 organizations representing 13 million people in trade unions, senior citizen, church, minority, consumer, environmental, public employee and community groups concerned about energy policy.

Last month, our organization, along with other national organizations, formally petitioned the Department of Energy, in Washington and around the country, to immediately hold a special rulemaking proceeding to examine the necessity of reimposition of price and allocation controls on home heating oil and other middle distillate products.

We believe the Department of Energy has a statutory duty to conduct such a proceeding and, in not doing so, has jeopardized the economic and physical well being of millions of Americans who rely on home heating oil and kerosene to heat their homes, and deisel fuel to run their tractors and trucks.

Inaction by the Administration to ensure adequate competition and reasonable prices in the middle distillate market has lead to windfall profits by the major oil refiners.

Heating oil prices have jumped from 50¢ last winter to close to one dollar a gallon today. Nationwide prices are over 90¢ -- an 80% increase over last year. There is ample evidence that these price increases are not justified by increased costs. Our analysis indicates that the major refiners have increased their net profit margins by as much as 12¢ a gallon -- accounting for an overcharge of $1.6 billion dollars for heating oil alone this winter. Those higher margins represent an average overcharge of $135 for a typical family using heating oil.

Under the Emergency Petroleum Allocation Act, Congress mandated that DOE exempt categories of fuel from price and allocation controls only if it is found that the exemption:

> 1) would not have an adverse impact on the supply of any other oil and supply product, and that
>
> 2) ... competition and market forces are adequate to protect consumers and that exempting such oil or refined product category will not result in inequitable prices for any class of users ...

In 1976, when FEA proposed the exemption of middle distillates from price controls, they found that:

> ** middle distillates were not in short supply and projected supplies would be sufficient to meet future demand, and
>
> ** competition and market forces existing in the industry were adequate to prevent consumers from being charged inequitable prices for middle distillates.

This is no longer the case.

Since that time, there has been ample evidence that competition is not adequate to protect consumers from unjustified prices, that prices have been rising faster than costs at a time when demand is down and that refiners' profit margins are expanding dramatically. (See attached petition and supporting memorandum)

In the face of this evidence, DOE has done little to determine if conditions exist that would require the reimposition of price controls. As the GAO stated in its January 22, 1980 report:

> DOE did not analyze refiners' and wholesalers' costs, margins, and selling prices to determine their reasonableness or validity. Therefore, DOE was not able to determine whether Federal action was

> required to respond to the increased prices. DOE has done little to analyze the current heating oil market situation. Although studies had shown that heating oil prices had exceeded expected levels, DOE has seen no need to determine the causes for the price increases.

DOE's own Office of Hearings and Appeals, on November 20, 1978, after an evidentiary hearing, concluded among other findings, that:

> (i) the price for No. 2 heating oil at the refining level subsequent to decontrol has increased at a greater rate than the cost increase refiners have been incurring;
> (ii) that situation is likely to persist in the future;...
> (v) significant doubts have been raised by the evidence in this proceeding that workable competition exists in the refining sector of the industry;

The OHA then went on to recommend several actions be undertaken immediately by DOE. The report stated that:

> "The assumption that competition exists in the heating oil industry was crucial to the FEA decision to decontrol No. 2 heating oil. Even aside from its critical relationship to the original decontrol decision, the absence of data that could resolve serious doubts as to whether workable competition exists in one of the nation's principal industries is a matter of serious concern. Moreover, the DOE should play an important role in resolving this matter in view of the emphasis in the statutes it is responsible for implementing on the priority role of its regulatory program to 'restore and foster competition' in the petroleum industry."

They went on to recommend:

> "If the prices of No. 2 heating oil at the refinery level continue to exceed costs and if the studies which the ERA conducts indicates that workable competition does not exist, the ERA should conduct formal rulemaking proceedings to determine the nature and extent of the price controls program that should be reimposed."

We are here today to ask this oversight subcommittee to get a commitment from DOE to take its own recommendations seriously and to fulfill its statutory obligation under the Emergency Petroleum Act. We have filed a formal petition with the DOE, and we hope that unlike previous petitions which they have ignored, DOE will respond to this one.

For those who are concerned about the high cost of heating oil, the stakes are enormous -- potentially billions of dollars in price gouging that can only be stopped by government action. It may not be in vogue these days to call for government regulation. But those of you involved in energy policy know that the government is being called upon to spend billions of taxpayers dollars to solve our energy problem, and consumers are forced to spend additional hundreds of billions more because of the decontrol of crude oil prices. All of this is necessary, we are told, in order to end our dependence on high priced imported oil. But let me put that in perspective.

DOE inaction on eliminating excess profits from refiners of middle distillates is as responsible for higher heating oil prices as is the increased price of OPEC oil. Don't the taxpayers deserve some protection from these billions of dollars of unjustified price increases?

We have detailed some evidence of prices being unjustifiably high in our accompanying petition. More evidence will be discussed at this hearing. But what is most disturbing is that DOE has failed to conduct audits of these major refiners during the decontrol period to determine what prices are justified.

It is not enough to say competition will eliminate unjustified prices. What evidence there is points to a lack of competition in the middle distillate market. As demand has dropped this winter, heating oil prices continue to increase.

Because of market domination and control of supplies concentrated in the hands of a few refiners, the major oil companies have been able to raise heating oil prices at a time when "spot market" prices are dropping dramatically. Wholesale jobbers seem to be more interested in maintaining their sources of supply than shopping around in the spot market for lower prices. While heating oil prices nationwide are approaching 90 cents a gallon, and with major refiners still announcing increases, recent spot market prices have been quoted at between 65 and 75 cents a gallon.

Competition has done nothing to dampen price increases in middle distillates. Evidence indicates that competition in the home heating oil refinery and wholesale distribution is lacking and, in fact, in every market in the nation a handful of firms maintain a large share of the market and that share is growing. In almost every state just four major oil companies control over half the market. In many states, the four firm concentration is between 65 and 75%.

Ironically, the high cost of wholesale middle distillate prices is also having an anti-competitive affect in the retail business as higher wholesale prices are forcing many dealers out of business.

The industry may dispute the evidence, DOE may dispute its own findings or find excuses for high middle distillate prices, but one point is indisputable. The agency has not acted on its statutory mandate to administer the Emergency Petroleum Allocation Act, to foster and preserve competition and to protect consumers from unjustified price increases.

For DOE to simply say they don't believe in price controls is to say they don't believe in the law. Until DOE acts to determine the degree to which prices are or are not justified and competition does or does not afford adequate protection, it is acting only to give official blessing to what appears to be a multi-billion dollar rip off of the American consumer.

news
Service Employees International Union · AFL-CIO, CLC
2020 K Street, N.W., Washington, D.C. 20006 · (202) 452-8750
George Hardy, International President · John J. Sweeney, International Secretary Treasurer

FOR IMMEDIATE RELEASE
Tuesday, January 29, 1980

FOR FURTHER INFORMATION CONTACT:
Bob Welsh (202) 452-8750

HARDY CALLS ON ENERGY DEPARTMENT TO REIMPOSE HEATING OIL CONTROLS

Washington, D.C.

George Hardy, President of the 600,000-member Service Employees International Union (SEIU', "fully supports" the Citizen/Labor Energy Coalition (C/LEC) petition drive to have the Department of Energy (DOE) reimpose price and allocation controls on home heating oil.

"Only government action can protect us from the unrestrained greed of the big oil companies," Hardy said, citing the near doubling of home heating oil prices, threats by some companies to cease production of heating oil, and two heating oil shortages narrowly averted by federal action earlier this winter. "The standard of living--the very lives--of many Americans are in jeopardy," he said.

Hardy and SEIU Secretary-Treasurer John J. Sweeney have signed the C/LEC petition to the DOE requesting that it initiate formal procedures required to reimpose controls and roll back prices.

NEWS FROM:
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FOR IMMEDIATE RELEASE

January 30, 1980

Contact: Robert Brandon
(202) 857-5225

COALITION DEMANDS DOE END HEATING OIL "EXCESS PROFITS"

WASHINGTON, D.C. -- A coalition of national organizations today accused the major oil companies of overcharging America's heating oil customers by as much as $1.6 billion this winter, and petitioned the Department of Energy to reimpose price controls on heating oil and diesel fuel in order to put an end to the excess profits.

As part of a nationwide campaign to put pressure on the Carter Administration to roll back heating oil prices, the Citizen/Labor Energy Coalition is presenting similar petitions to DOE regional offices in Boston, New York, Philadelphia, and Chicago. Organizations joining with the Coalition in petitioning DOE include the AFL-CIO, the National Council of Senior Citizens, the National Urban League, and others. (See attached list)

AFL-CIO president Lane Kirkland stated "The AFL-CIO remains convinced that controls must be reimposed on middle distillate products (heating oil). The return to control of these products will represent a major step in attacking the real causes of our present double-digit inflation."

When Congress removed price controls from "middle distillate fuels" (which includes heating oil) in 1976, the Coalition noted, DOE's predecessor gave assurances that prices would go up by no more than 2 to 3 cents per gallon by 1979, because competition in the oil industry would hold prices down. From 1978 to 1979, however, heating oil prices jumped over 40 cents per gallon nationwide, far more than justified by crude oil prices and operating cost increases.

The Coalition stated that while OPEC is pushing prices higher and higher, oil company profiteering is adding just as much to the nation's heating oil bills.

Citing figures from the DOE, the National Petroleum Council, and the Consumer Energy Council of America, the Coalition concluded that the oil companies increased their profit margins on heating oil from 2.7 cents per gallon in October 1978 to 12.7 cents per gallon a year later.

The Coalition pointed out that in most states, a handful of major oil companies control over 50% of the heating oil market, and with that kind of concentration refiners can jack up prices and profits even at times when demand is dropping, such as the winter of 1979-80.

(MORE)

The Coalition noted that the $1.6 billion in excess oil company profits from those higher margins represents an average overcharge of $135 for a typical family using heating oil.

"It's a triple whammy," said William Winpisinger, president of the International Association of Machinists and of the Citizen/Labor Energy Coalition. "We're paying more because of OPEC's price increases for imported crude; we're paying more because of President Carter's decision to decontrol domestic crude; and now we're paying still more because the oil companies have decided to make a higher profit on their refining operations."

"For older Americans, energy inflation is a life or death crisis," said William F. Hutton, executive director of the National Council of Senior Citizens. "Because oil company greed is not sufficient cause to place millions of elderly lives in danger, the NCSC is calling for a return to controls on heating oil.".

The National Urban League cited its concern about the impact of skyrocketing fuel bills on the nation's poor and minorities. "If prices are unjustified, they should be rolled back; if not, more help for the poor is needed."

The Coalition released figures showing that the emergency fuel assistance funds available to help poor people with their heating bills will fail to come up to the allowable ceiling, and fall far short of the average increase in fuel bills.

Robert M. Brandon, the Coalition's Washington Director, cited numerous examples of prices outpacing costs. He noted that the GAO recently reported that DOE "did not analyze refiners' and wholesalers' costs, margins, and selling prices to determine their reasonableness or validity... DOE has done little to analyze the current heating oil market situation. Although studies had shown that heating oil prices had exceeded expected levels, DOE has seen no need to determine the causes for the price increases."

The Citizen/Labor Energy Coalition includes more than 200 trade union, senior citizen, environmental, minority, religious, neighborhood, and community organizations around the country.

To: The General Counsel
Department of Energy
Forrestall Building
Washington, DC 20585

Petition for Rulemaking

The undersigned organizations hereby petition the Department of Energy (DOE) to hold a special rulemaking proceeding to examine the necessity of reimposition of price and allocation controls on middle distillate products. The authority for this petition is found at 10 C.F.R. S 205.161(b). We believe that No. 2 heating oil (kerosene, diesel fuel, or other) is in uncertain supply, that competition in the industry is not adequate to protect consumers, and that as a result of uncertain supplies and lack of competition, we are facing prices which are inequitable and much too high. The lack of price controls may be causing overcharges of as much as 15¢ per gallon of heating oil, due to increased oil company profit margins.

We believe, as the attached memorandum suggests, that these circumstances of the marketplace are contrary to the goals and objectives of the Emergency Petroleum Allocation Act, Section 4(b)(1).

We request prompt scheduling of a public proceeding to consider the reimposition of price controls on middle distillates and to roll back prices to cost justified levels. Please respond to this request within 30 days.

(Signed)

William Hutton, Executive Director NATIONAL COUNCIL OF SENIOR CITIZENS
Doug Fraser, President UNITED AUTO WORKERS
Jerry Wurf, President AMERICAN FEDERATION OF STATE, COUNTY & MUNICIPAL EMPLOYEES
Ellen Berman, Director CONSUMER ENERGY COUNCIL OF AMERICA
Dolores DaLomba, Executive Director NATIONAL CAP EXECUTIVE DIRECTORS ASSOCIATION
Mark Green, Director PUBLIC CITIZEN
Bernard Veney, Executive Director, NATIONAL CLIENTS COUNCIL
Lane Kirkland, President AFL-CIO
Robert Goss, President OIL, CHEMICAL & ATOMIC WORKERS
William Winpisinger, President INTERNATIONAL ASSOCIATION OF MACHINISTS
Jacob Sheinkman, President AMALGAMATED CLOTHING & TEXTILE WORKERS UNION
Willard Maguire, President NATIONAL EDUCATION ASSOCIATION
George Hardy, President SERVICE EMPLOYEES INTERNATIONAL UNION
Kathleen O'Reilly, Director CONSUMER FEDERATION OF AMERICA
William Wynn, President, UNITED FOOD & COMMERCIAL WORKERS
Maudine Cooper, Washington Director, NATIONAL URBAN LEAGUE
Robert M. Brandon, Director, CITIZEN/LABOR ENERGY COALITION

PRICE CONTROLS ON HEATING OIL AND OTHER MIDDLE DISTILLATES

Background

Until 1976, the Federal Government controlled the price of heating oil and still has that authority under the Emergency Petroleum Allocation Act. Price controls on crude oil and oil products such as heating oil, diesel fuel, gasoline, and propane were adopted because of a concern that oil shortages, supply constraints, and a lack of competition in oil and oil products could lead to excessive prices and market interruptions.

Since that time, administrative actions have been taken to decontrol crude oil (President Carter's action in 1979) and middle distillates — heating oil, kerosene, and diesel oil. (President Ford's action in 1976.)

As will be pointed out, the concerns that lead to the adoption of price and allocation controls still exist. There is particular concern over heating oil (and other middle distillates) given the rapid increases in the price of these products.

Removing Controls in 1976

The administrative actions by the Ford Administration to remove price controls were met with a great deal of skepticism in Congress by those who felt heating oil customers needed continued protection from rapid price increases in excess of crude oil and refining costs. The Congress reluctantly voted not to block the decontrol effort after receiving assurances by the Federal Energy Administration (FEA) that heating oil prices would not rise as a result of decontrol and that FEA would monitor prices and take appropriate action if prices rose by more than two cents above the permissible levels under price controls.

According to Representative Silvio Conte, FEA "promised that if prices go up by more than two cents a gallon above actual June 1976 selling prices, which is seven to nine cents below the maximum price allowable under controls, then a hearing will be held within ten days: a remedy will be ordered within ten days after the hearing, an appropriate remedy will be put into effect to bring prices back within the two cent margin within 30 days." (1)

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(1) In a letter to Representative Silvio Conte submitted into The Congressional Record during House debate, then FEA Administrator Frank Zarb stated that if Congress did not disapprove the decontrol proposal, FEA would set-up "a quick response monitoring system that will compare actual prices...with estimates of what they would have been if regulatory controls were still in effect" including:

> A series of automatic steps that will immediately unfold if prices in the decontrolled market exceeded by two cents the estimate of what they would have been with continued controls...

The Failure of the Monitoring System to Hold Down Prices

The quick response monitoring system did little to dampen price increases because it had numerous flaws. First, it was unable to keep pace with actual circumstances. For example, it took until March 28, 1977 for FEA to announce that ceilings had been broken in the North Central Region back in January. Second, it relied on industry provided data which was continually at variance with independent surveys of actual home heating oil prices. The FEA's own Task Force on Compliance and Enforcement reported "a disproportionate amount of the overcharges (estimated at up to several billion dollars) ...may have inured to the benefit of the nation's major refiners." (FEA claimed it was unable to check separate data on the costs of refining and marketing.) Third, the monitoring system is premised on the existence of competition in the oil industry. The concentration of major oil companies in the heating oil markets, the ability through transfer pricing to subsidize refining and marketing with profits from production activities, the ties of the majors to the OPEC cartel, and the increasing reports from independent retailers of price and supply squeezes by the majors all point to the fact that the free market supply does not exist.

The Lack of Controls Under the Department of Energy

FEA's successor agency, DOE, has continued with lax monitoring efforts in insuring just and equitable prices for heating oil. In the face of ample evidence of excessive refiner profit margins and anti-competitive activities and trends, DOE has not held full evidentiary hearings to refute the findings of their own Office of Hearings and Appeals which strongly suggested that reimposition of controls would be warranted.

Specifically, in its November 20, 1978 report, the Office of Hearings and Appeals which conducted the only evidentiary hearings on the subject found:

> (i) the price for No. 2 heating oil at the refining level subsequent to decontrol has increased at a greater rate than the cost increases refiners have been incurring;
>
> (ii) that situation is likely to persist in the future;

(l) Con't. "FEA will continue to monitor and report to Congress on market share trends in the industry in the event of sharp swings in market shares or widespread problems of supply-cutoffs that appear to be contrary to the Emergency Petroleum Allocation Act (EPAA) objective of preserving the competitive viability of the independent sector of the industry, FEA will immediately convene public hearings to determine the necessity for reimposing controls or if required will take whatever emergency action is deemed appropriate before convening hearings."

(iii) the overcharges refiners are likely to receive in sales of No. 2 heating oil during the period from decontrol to the end of the 1978-1979 heating oil season will be approximately $331 million;

(iv) low income families are very seriously affected by increasing fuel oil prices;

(v) significant doubts have been raised by the evidence in this proceeding that workable competition exists in the refining sector of the industry; and

(vi) antitrust remedies are not likely to be successful in resolving competitive problems in the refining industry.

The report recommended full hearings should be held with the burden on the oil industry of showing that workable competition exists and price increases were not excessive in terms of cost increases.

In spite of promises by then Deputy Secretary John O'Leary to hold full evidentiary hearings where industry witnesses could be cross-examined, the DOE simply asked the industry to come in and supply their own data. Full hearings have never been held.

No independent audits have ever been conducted by DOE to look at refinery costs and profit margins in the post price controls period after 1976.

While DOE still continues to get unaudited information on costs and profits from the companies, other evidence clearly points to excess profits and the lack of competition in the heating oil and middle distillate area.

Evidence of Excess Profits and Lack of Competition

- A study done by DOE's Economic Regulatory Administration (ERA) concluded that from July 1976 when controls were lifted to June 1979 that nine major refiners representing 55% of the market charged their customers $481 million more than would be allowed under price controls. Extending those overcharges to 100% of the market would indicate excess profits of $875 million by the entire industry. (These numbers actually understate potential excess profits because they reflect an allowance for going two cents per gallon over price control levels, as well as costs that were "banked" during the first 2½ years of the study because market conditions, then, prevented refiners from passing all those costs through. It is disturbing to note, however, that the major excess profits occurred during the first six months of 1979 when heating oil was in short supply and refiners passed through all costs and, at the same time, significantly increased profits. Disregarding the banked costs, refinery excess profits for the nine refiners were calculated as $797 million or $1.45 billion for 100% of the market.) It is our understanding that this report is being updated by a look at July through September 1979 which concludes profits were lower. This study, however, is flawed because it examines a period of time when profits are traditionally low because of high stockpiling and storage costs and low sales due to the summer months. Traditionally, profits in the heating oil area show-up during the October through March period. That's why the three year study is more reliable.)

o House Energy and Power Subcommittee Chairman, John Dingell, indicated at a November 1979 hearing that his staff investigations indicated that there are a number of things that appear to bear scrutiny at this time. "First, based on staff investigations, major refiners have taken advantage of the tight heating oil market over the last nine months, and there appears to be substantial price gouging. Two, based on Council on Wage and Price Stability (COWPS) actions and Mr. Kahn's memorandum to the President, COWPS voluntary guidelines appear to be totally ineffective in restraining price increases in the oil industry at a modest or reasonable level. Three, decontrol of home heating oil appears to have permitted instances of substantial unjustified price increases, with a significant impact on inflation and the consumer." For example, he cited one company that admitted their gross margins on heating oil had increased by 102% while industry indices show refiner costs had increased by 29%, leaving 75% of their increase unexplained by cost increases..."Contrary to the refiner's testimony before this and other subcommittees, cost increases appear to be irrelevant to their pricing decisions. Over the last nine months, they have charged what the market will bear...Considering the major refiners' pricing process of charging 'what the market will bear,' plus their incredible third-quarter profits, there appears to be at least circumstantial evidence that price gouging has occurred in heating oil prices."

o Before the same congressional hearing COWPS Director Alfred Kahn stated that information received by COWPS "seemed to suggest that the refinery margins were increasing much more than could be explained in terms of the behavior of crude oil prices...For a while it looked as though you could not explain the product price changes more than 35% of them in terms of the increase in crude oil costs. More recently, the figures put us in the 40 to 50 percent range."

o The Consumer Energy Council of America has calculated gross refiner margins using DOE data printed in the Monthly Energy Review.

	Oct. 1978	Oct. 1979	% Change
Refiner Selling Price	38.1	68.6	80
Acquisition Cost of Crude Oil	30.0	49.0	63
Gross Margin	8.1	19.6	142

As these official DOE numbers clearly show, the gross margins added to the cost of crude oil by refiners have ballooned 142% in the past year.

According to the National Petroleum Council, refinery costs in 1978 averaged 5.4¢/gallon of product. To calculate 1979 profits, we inflate the 5.4¢ cost by the increase in the Nelson Index (the industry's index of cost increases, including allowance for normal profits)to get a 6.9¢ cost. Then, simply subtract the costs from the gross margins and obtain profits — totalling a 370% increase in a single year, according to this calculation.

	Oct. 1978	Oct. 1979	% Change
Gross Margins	8.1¢	19.6	142%
Operating Costs	5.4	6.9	28%
Profit Margin	2.7	12.7	370%

o Examining price increases from October 1978 to September 1979, the Citizen/Labor Energy Coalition has computed that of the 34 cent increase in retail prices, acquisition costs of imported oil accounted for ten cents, acquisition costs of domestic crude oil added another eight cents, and increased refiner net profit added ten cents (after accounting for 1.5 cents of increased refiner operating costs).

o According to a memo prepared by the COWPS Staff, excessive profits are being made because oil products like heating oil are being sold at prices reflective of the highest crude oil prices even through average crude oil costs are much lower.

o A Library of Congress Research Service Study, "Middle Distillate Pricing and the Recontrol Controversy," (October 3, 1979) noted that while refiner's crude oil costs had increase 14.8 cents a gallon (47%) between January and August, 1979, their selling prices increased 25 to 26 cents a gallon (61%) during the same period.

o Because of market domination and control of supplies concentrated in the hands of a few refiners, the major oil companies have been able to raise heating oil prices at a time when "spot market" prices are dropping dramatically. Wholesale jobbers seem to be more interested in maintaining their sources of supply than shopping around in the spot market for lower prices. While heating oil prices nationwide are approaching 90 cents a gallon, and with major refiners still announcing increases, recent spot market prices have been quoted at between 65 and 75 cents a gallon.

o Competition has done nothing to dampen price increases in middle distillates. Evidence indicates that competition in the home heating oil refinery and wholesale distribution is lacking and, in fact, in every market in the nation a handful of firms maintain a large share of the market and that share is growing. In almost every state just four major oil companies control over half the market. In many states, the four firm concentration is between 65 and 75%.

As demand has dropped this winter, heating oil prices continue to increase.

Emergency Fuel Assistance is Inadequate

The Emergency Fuel Assistance Program will provide some relief from skyrocketing fuel bills for the nation's poor who spend four times as much of their annual income on energy as the average American household. But, the $1.6 billion program is inadequate.

DOE's Fuel Oil Marketing Advisory Committee recommended emergency assistance of $3.2 billion for this winter at a time when heating oil prices were between 48 and 55 cents a gallon. At present prices, the committee's chairman has indicated the need is between $5 and $6 billion.

Many people will be experiencing increases in the heating bills of more than $500.00 this winter. While ceilings for emergency assistance funds are as much as $300.00 and $400.00 in the colder states, if all those eligible apply, the money available would be far less than half the ceiling amounts.

The Result: Excess Profits; Higher Fuel Bills

Because of an apparent lack of competition, the evidence strongly suggests that major refiners are increasing prices to unjustified levels. Present margins may be as much as 12.7 cents a gallon above costs (including normal profits and dividends accounted for by the industry's own Nelson Index of refiner costs.)

Projecting a 12.7 cent increase over this winter's heating season (October-March), it is estimated that the nation's heating oil customers will be paying as much as $1.62 billion for excess profits.

The monthly net margin increases from October 1978 through October, 1979 accounted for excess profits in the total middle distillate market of $4.1 billion as follows:

Heating Oil	$1.74 Billion
Diesel Fuel	1.70 Billion
Industrial and Utility Uses	$.67 Billion

Conclusion

Price controls could mean an immediate reduction of fuel oil and diesel fuel prices by more than 10 cents a gallon. Evidence strongly indicates that there is a lack of competition in the middle distillate refiner market and this has resulted in unjustified price increases and profits. Under the terms of the Emergency Petroleum Allocation Act, these conditions require DOE to hold full evidentiary hearings to determine if "competition and market forces are adequate to protect consumers" and whether the lack of price controls did or did not "result in inequitable prices..."

As the GAO concluded in its January 22, 1980 report on heating oil prices in the Washington, D. C. area:

"DOE has done little to analyze the current heating oil market situation. Although studies had shown that heating oil prices had exceeded expected levels, DOE has seen no need to determine the causes for the price increases."

We believe it's time to act to protect the American consumer.

STATE	TOP COMPANIES MAKING FUEL DELIVERIES	% OF TOTAL DELIVERIES IN STATE * (Top 4 companies)	% OF TOTAL DELIVERIES IN STATE (Top 8 companies)
Connecticut	Amerada Hess Chevron Exxon Texaco	66%	84%
Delaware	Atlantic Richfield Exxon Getty Keystone	72%	90%
Maine	Exxon Getty Mobil Northeast Petro	67%	95%
Maryland	Amerada Hess Atlantic Richfield Exxon Gulf	60%	83%
Massachusetts	Exxon Northeast Petro Texaco Union	65%	85%
New Hampshire	CH Sprague Exxon Northeast Petro Union	62%	91%
New York	Exxon Gulf Mobil Northville	50%	72%
Pennsylvania	Atlantic Richfield Exxon Gulf Texaco	48%	71%
Illinois	Amoco Clark Marathon Phillips	57%	80%
Wisconsin	Amoco Exxon Gulf Phillips	44%	69%

* 1978 figures

Source Department of Energy

OIL COMPANY PROFITS: 1979

Company	4th Quarter 1979 Net Income (in millions)	% Profit Over 4th Quarter 1978	Total Net Income 1979 (in millions)	% Increase Over 1978
Mobil	$541	72%	$2,010	78%
Exxon	$1,365	60%	$4,290	55%
Atlantic Richfield	$343	34%	$1,160	45%
Getty	$182	80%	$ 604	83%
Union	$452	13%	$ 500	31%
Gulf	$366	34%	$1,320	68%
Texaco	$533	63%	$1,750	106%
Standard Oil of Indiana	$368	70%	$1,500	40%
Shell	$331	72%	$1,130	38%
Sun	$222	107%	$ 699	69%
Sohio	$451	174%	$1,186	163%

STATE	HEW AND CSA ALLOCATED FUNDS FOR FUEL ASSISTANCE	# OF FAMILIES UNDER 125% OF POVERTY	STATE CEILING PER FAMILY	ESTIMATED ACTUAL FUNDS AVAILABLE	INCREASE IN FUEL BILL THIS WINTER (estimated)
California	$19,360,000	1,452,000	$400	$148	
Connecticut	$29,200,000	140,000	$400	$200	$520
Delaware	$ 3,741,000	33,200	$400	$113	
District of Columbia	$ 4,362,000	60,000	$400	$ 72	
Indiana	$31,800,000	306,100	$400	$103	$450
Kentucky	$14,970,000	326,200	$300	$ 45	
Illinois	$66,552,000	668,400	$300	$ 99	
Maine	$16,800,000	83,300	$200	$202	
Maryland	$20,730,000	196,700	$250	$105	
Massachusetts	$56,643,000	315,800	$400	$179	$513
Michigan	$66,400,000	553,400	$360-400	$120	$576
Minnesota	$48,600,000	252,100	$400	$192	
New Hampshire	$10,520,000	46,400	$400	$228	$540
New Jersey	$51,200,000	361,000	$400	$141	
New York	$164,464,000	1,216,700	$300	$135	$520
North Carolina	$24,100,000	467,800	$400	$ 51	
Ohio	$58,300,000	630,000	$400	$ 92	$470
Oregon	$15,300,000	168,400	$300	$ 92	
Pennsylvania	$84,320,000	796,900	$250-400	$105	
Rhode Island	$ 9,170,000	63,100	$300	$145	
Tennessee	$14,940,000	388,000	$400	$ 38	
Vermont	$ 7,310,000	38,500	$400	$192	$568
Virginia	$24,090,000	300,100	$200	$ 80	
West Virginia	$10,200,000	168,300	$400	$ 60	
Wisconsin	$43,100,000	242,000	$400	$178	$600

NEWS from the AFL-CIO
DEPARTMENT OF PUBLIC RELATIONS
(202) 637-5010

For Release: P.M. PAPERS, WEDNESDAY, JANUARY 30, 1980

AFL-CIO President Lane Kirkland today made the following statement on the reimposition of controls on heating oil:

The AFL-CIO remains convinced that controls must be reimposed on middle distillate products (heating oil).

The return to control of these products will represent a major step in attacking the real causes of our present double-digit inflation.

With heating oil prices already 70 percent higher than last year, Americans will be paying over $6 billion more for heat this winter while oil company profits continue to skyrocket.

The AFL-CIO, therefore, is joining with other organizations and individuals in petitioning the Department of Energy to hold a special rulemaking proceeding to examine the necessity of reimposing these controls.

National Urban League, Inc.

The National Urban League is concerned about the impact of skyrocketing fuel bills on the nation's poor and minorities. Poor people who are already spending between 25 and 40 percent of their income on energy bear a special burden with heating bills, which are 75 percent higher this winter than last. It is clear that the emergency assistance funds available cannot meet this enormous burden. Many families will still be faced with the cruel choice between Heating and Eating. If prices are unjustified they should be rolled back if not, more help for the poor is needed. We are concerned that the Department of Energy has not acted to examine why heating bills are so high and whether price controls are needed. Today we are joining with Citizens-Labor Energy Coalition and others informally asking DOE to begin procedures to determine if heating oil prices are unjustified and if price controls are necessary. For many poor black Americans action could help provide relief this winter but inaction could bring disaster.

Maudine R. Cooper
Acting Vice President

January 30, 1980

Statement of William R. Hutton, Executive Director
National Council of Senior Citizens

The extraordinary rise in the price of home heating oil has America's elderly running scared. Their Social Security incomes have increased less than 10 percent this year, while the cost of home heating oil has nearly doubled.

Even with the help of Federal fuel assistance payments--which average only $100 per person--thousands of older people will find themselves unable to pay for adequately heated homes this winter.

These older people will still face the dangerous and humiliating dilemma of whether to "heat or eat?" Should they choose to "heat" they could possibly become victims of malnutrition or even starvation; should they choose to "eat" they might be victimized by an equally serious condition called "accidental hypothermia," a drop in deep body temperature that can cause death. Estimates of the National Institute on Aging place as much as 10 percent of the elderly population at risk of this cold weather killer.

For older Americans, then, energy inflation is a life or death crisis. Because oil company greed is not sufficient cause to place millions of elderly lives in danger, the National Council of Senior Citizens is calling for a return to controls on home heating oil, and is asking Congress and the President to take immediate action to implement this policy.

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[illegible]
Houston, Texas

January 30, 1980

It is unconscionable that the major oil companies continue to reap windfall profits, while they are helping to reduce the quality of life for all of us. Profiteering in fuel oil has put tremendous pressure on state and local budgets, forcing a reduction of needed services for all our people. We support the efforts of the Citizen/Labor Energy Coalition to reimpose price controls on heating oil, and thereby alleviate some of the suffering this winter.

Jerry Wurf
International President

JW:fcr

LABOR NEWS

**INTERNATIONAL ASSOCIATION OF MACHINISTS
AND AEROSPACE WORKERS
1300 Connecticut Ave., N.W.,
Washington, D. C. 20036
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Contact Bob Kalaski

STATEMENT

Price Controls on Heating Oil

by

William W. Winpisinger
President
International Association of Machinists and Aerospace Workers

The Carter Administration's Department of Energy is guilty of murder for not reinstating price controls on home heating oil. Every year, many elderly Americans freeze to death because they cannot afford to heat their homes.

The years since 1976, when President Ford decontrolled heating oil prices, have been great for Big Oil. They have doubled their prices, raising them 70% in the past year alone. Their profits have shot up 134% for refining and wholesaling.

But many Americans, especially the elderly, have suffered greatly. For example, many persons trying to make ends meet on Social Security checks of $300 a month find themselves facing monthly heating bills for their homes of $400 or more.

Federal fuel assistance provides less than 1/3 of what is needed. It is woefully inadequate.

The answer is elementary. The Department of Energy must control oil prices. It has the power. The question is: Will the Carter Administration buck its friends in Big Oil and act to help the American people?

# # # # #

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COMMUNITY ACTION
PEOPLE HELPING PEOPLE

**National Community Action Agency
Executive Directors Association**

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NACAAB

January 29, 1980

STATEMENT OF THE NATIONAL COMMUNITY ACTION AGENCY
EXECUTIVE DIRECTORS ASSOCIATION

Contact:
William Ray, Governmental Relations Specialist

The decontrol of oil has had a dramatic effect on the pocketbooks of all consumers. Low-income persons have borne a disproportionate share of the burden of higher home heating oil costs. With cost doubling in the last year, low-income consumers spend as much as 80% of their incomes on energy.

The elderly poor on fixed incomes are also faced with critical decisions. Often they must choose between eating or heating. This cruel choice will only be abridged through the reimposition of controls on prices. NCAAEDA urges the DOE to reimpose controls on home heating oil and crude to lessen the impact of spiralling prices on the elderly and poor.

"Serving 20 Million People Daily"

CONSUMER ENERGY COUNCIL of AMERICA
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Int'l President
Int'l Assoc. of Machinists
and Aerospace Workers

TESTIMONY

OF

JAMES L. FELDESMAN

GENERAL COUNSEL

CONSUMER ENERGY COUNCIL OF AMERICA

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENT, ENERGY

AND NATURAL RESOURCES

OF THE

GOVERNMENT OPERATIONS COMMITTEE

U.S. HOUSE OF REPRESENTATIVES

FEBRUARY 12, 1980

"Serving 20 Million People Daily"

Mr. Chairman and members of the Subcommittee:

I am pleased to be here today representing the Consumer Energy Council of America (CECA) and the Nation's consumers of home heating oil and other middle distillate products. With me is Dr. Mark Cooper of CECA's staff. As this Subcommittee is well aware, CECA is a Washington-based consumer organization which concentrates its efforts on National energy matters. Its membership includes consumer organizations, farming interests, aging groups, representatives of the cities, non-profit and public power associations, labor organizations, and other consumer-oriented bodies.*/

CECA and its forerunner organization, The Energy Policy Task Force of the Consumer Federation of America, have been particularly interested and actively involved in the issues relating to decontrol of middle distillate products. That interest and involvement are demonstrated by our comments below.

I. BACKGROUND OF THIS HEARING

A. Product Decontrol

In June, 1976, middle distillates were decontrolled; i.e. they were freed from the allocation and policing requirements imposed under the Emergency Petroleum Allocation Act, as amended (EPAA). Decontrol is governed by the procedures and requirements of § 12(d)(1) of the EPAA. In order to effect decontrol, there must be a finding

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*/ A listing of CECA members is appended to the testimony.

> "that such oil or refined product category is no longer in short supply and that exempting such oil or refined product category will not have an adverse impact on the supply of any other oil or refined petroleum product subject to [the EPAA]; and . . . that competition and market forces are adequate to protect consumers and that exempting such oil or refined product category will not result in inequitable prices for any class of users of such oil or product."

After making this finding, the President (or his designee) must submit a decontrol proposal to Congress which may, by majority vote of either House, override or veto the proposal. The decontrol proposal is to be accompanied by a statement of the President's (or designee's) views as to the "potential economic impacts" of decontrol as well as the effects of decontrol on particular aspects of the economy such as competition, the availability of consumer goods, unemployment and consumer prices.

To comply with this requirement, the Federal Energy Administration (FEA) prepared a document entitled "Findings and Views Concerning the Exemption of Middle Distillates" (June 15, 1976).

B. Findings and Views and Other Forecasts

"Findings and Views" was nothing short of a disgrace. It was full of charts, data and narrative, the combination of which was not only inconsistent and incoherent, but also lacking in compliance with EPAA requirements. The Congress, as might be expected, was not especially impressed by "Findings and Views" and demanded further explanation of precisely what FEA was forecasting in the way of consumer prices after decontrol.

Accordingly, FEA's forecasts of future prices and market behavior are contained not only in "Findings and Views" but in a rather extensive body of communications to the Congress. What can be gleaned from the two is FEA's prediction that, with decontrol, market forces would be such that middle distillate prices to consumers would rise only as much as increases in crude oil costs (and therefore less than they could theoretically rise under the then-existing system of controls). Furthermore, because of the "squeeze" being put on the marketing sector by controls -- the description is FEA's -- not only would consumer price rises not exceed crude oil cost increases (according to FEA), but FEA even suggested that refiner margins would be reduced once decontrol became effective.[1] Only three and one-half years later, these forecasts have proved to be nothing short of ridiculous.

C. Monitoring Systems

Even though Congress did not veto middle distillate decontrol, the skepticism of its members regarding the wisdom of decontrol caused FEA to adopt a price monitoring system for home heating oil. The system, somewhat peculiarly, ignored FEA's forecasts of prices during decontrol and instead assumed that all of the increases possible under controls (including those FEA's forecast denied would occur) plus a 2 cents "flexibility factor" were legitimate. The reasons why this system was utilized have never been adequately explained.

Prices went up the first year by more than crude oil costs (the FEA forecast), more than simulated controls, and even slightly more than FEA's monitoring threshhold. In response, FEA held a hearing in which it was convincingly shown that the refining sector had, despite predictions to the contrary, expanded its margin by the 2 cents "flexibility factor."

After months of deliberation subsequent to the hearing, by which time a Department of Energy (DOE) had emerged, DOE decided on another year of monitoring; this time at refining, wholesale and retail levels. The monitoring was to be accompanied by a novel public policy experiment: an adversarial hearing at the conclusion of the 1977-78 heating season, in which all parties, including the DOE, could be involved to sort out once and for all the middle distillate situation.

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[1] See, testimony of the late, great Gorman Smith, Hearings, Committee on Interstate and Foreign Commerce, H.R. Doc. No. 914-131 (June 22, 29, 1976), p. 38.

What were the results of that hearing? The Office of Hearings and Appeals (OHA) of DOE which held that hearing concluded *inter alia*, that:

(1) The refining section since decontrol had increased its margins at a greater rate than its costs and it was likely to continue to do so;

(2) Low income families were seriously affected by the rising prices;

(3) There were "significant doubts . . . raised by the evidence . . . that workable competition exists in the refining sector . . ."; and

(4) It was unlikely that antitrust remedies would be successful in resolving any such competitive problems.

To deal with these findings, OHA recommended that:

(1) The Economic Regulatory Administration (ERA) of DOE undertake a series of studies by September 1, 1979,

involving marketing practices and comparative profitability of individual refiners and competition within the marketing sector. The refinery level study was to involve a highly detailed analysis of distillate costs, profits and competition among refiners.

(2) Price controls should be reimposed if the studies indicate an absence of workable competition.

(3) There should be a hearing prior to completing the studies which would allow refiners to show that workable competition existed. If refiners failed to participate or failed to prove workable competition, controls should be reimposed.

(4) If refiners' aggregate price exceeded the guidelines imposed by the Council on Wage and Price Stability, controls should be reimposed.

(5) ERA should immediately reinstate a comprehensive monitoring system.

(6) ERA should undertake a series of actions to aid low-income consumers.

D. DOE's Response

These recommendations, made to the ERA, were never acted upon and remain before the ERA for final resolution. ERA sidestepped action by taking the position that it needed to verify cost data OHA had used to make its decision. That verification process involved a report[2] and a legislative type hearing held late last summer. With the hearing concluded, the question of action on OHA's recommendations is again relevant. This year, ERA has not even gone through the effort of sidestepping the OHA recommendations. It has instead stonewalled on the entire issue. To ERA, it is as though the OHA recommendations do not exist. They do, and this Subcommittee should insist that ERA stop ignoring them.

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[2] Analysis of Refiners' No. 2 Distillate Costs and Revenues; July 1976 - June 1979; Sept. 1979. An update of the report through October, 1979 has been provided to the Subcommittee.

II. PRICES AND THEIR IMPACT

That ERA has ignored the OHA recommendations is all the more exasperating when prices since decontrol are properly analyzed. We have such a proper analysis, which is presented below. It is confined to refiner-level behavior. While we remain concerned about the price increases attributable to the marketing sector, refiner price increases represent too clear an abuse to ignore.[3]

A. FEA's Forecast

As the Subcommittee will recall, FEA predictions at the time of decontrol indicated that refiner margins would shrink. In fact, they have expanded by phenomenal amounts.

In June, 1976, refiner distillate prices were 30.5¢ per gallon and margins were 4.6¢ per gallon. In October, 1979, the latest period in which DOE statistics are available, they are 68.3¢ per gallon and 19.6¢ per gallon respectively; an increase of 37.8¢ per gallon in price and 15¢ per gallon in margins. During the same period, crude oil cost increases have been only 23¢ per gallon. In other words, following FEA's prediction, refiner increases should have been no more than 23¢ per gallon, the amount of crude oil cost increases. Instead they increased about 15¢ per gallon beyond crude oil

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[3] A Technical Support Document is appended to this testimony and provides information on the methodology used for calculations we make in the course of the testimony.

best copy available

costs -- 15¢ per gallon more than anticipated.

This increase of prices above crude oil cost increases has resulted in accumulated revenues of $4.97 billion more to refiners than would have been received had refiner margins increased by no more than crude oil costs. FEA's prediction, suffice it to say, bears no resemblance to actual market behavior.

B. FEA Forecast Plus Inflation

Despite FEA's pricing forecast, it is to be expected that refiners will contend that they deserve to increase their margins to keep pace with inflation. It is probably necessary, therefore, to consider how much of their heating oil price increases beyond higher crude oil costs can be justified by inflation. Before doing so, however, we should point out that inflation hurts everyone. Refiners have no special right to avoid the effects of inflation while others suffer.

To adjust refiners' margins for inflation, we have used the oil industry's own index of inflation in refinery operation costs -- the Nelson Refiner Operations Index. The Nelson Index is compiled monthly by the *Oil and*

Gas Journal.[4] The index, which takes into account the costs of labor and fuel needed to run a refinery, investment in physical plant, and chemicals used in refining, is regularly revised to reflect changes in productivity, energy efficiency, and other elements of cost.

The latest month for which the Nelson Index has been computed is August, 1979. We have projected the Index to cover September and October. The index has increased 43 percent with these projections since decontrol of heating oil.

This Index increase is applied to the June, 1976, refiners' margin of 4.6¢ per gallon yielding a margin of 6.6¢ per gallon.

Accordingly, even with inflation, refiner margins should only have increased by 2¢ per gallon. The accumulated "overcharge," i.e. the charges to consumers reflecting the increase of margins above costs since decontrol, is $2.65 billion.

C. Purchased Product Adjustment

Although use of the Nelson Index on the full margin rather than on the cost components of that margin is very generous, we have been advised from many quarters that our estimate of costs using Nelson is too low because it ignores purchased product costs. Let us note thatit does not ignore purchased product since purchased product costs embedded in the June, 1976, refiners' margin are inflated by the Nelson Index. Nevertheless, it is true that our estimate excludes some increase purchased product costs and because our generosity is boundless, we have factored into our estimate an increased cost for purchased product.

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[4] See Oil and Gas Journal, March 3, 1958, p. 167 and January 10, 1977, p. 86 for discussion of the index.

That increased cost is $280 million. This $280 million figure, subtracted from our previous overcharge estimate, still leaves a cumulative overcharge by refiners since decontrol of $2.37 billion. Moreover, we calculate that the October, 1979 per gallon overcharge is 12.2¢ per gallon; i.e. if refiners had only charged for increased costs, their prices would have been 12.2¢ per gallon lower in October.

These are whopping figures. The per gallon overcharge would allow a price roll back -- if controls were reimposed by DOE -- of no less than 12¢ per gallon, cutting the $1.00 per gallon consumer price to 88¢ per gallon. But that is not all. The cumulative overcharge which is already nearly twice the size of funds available for low-income assistance could be refunded to the 16 million families who use heating oil. This would mean about $150 per family. On a

per gallon basis, refunds over this heating season (October to March) would be 20¢ per gallon. When added to the October per gallon overcharge, this would mean that consumer prices could be rolled back by 32.2¢ per gallon right now. Putting it simply, consumers could only be paying 68¢ per gallon during this winter rather than the $1 per gallon many are now being charged.

I wish this were all, but it is not. Our conservative estimate is that consumers by the end of March will pay an additional $1.2 billion or $75 per family because of refiner overcharges. By the end or March, then consumers will have been overcharged $3.5 billion by refiners and individual families an average of about $225 each. The Subcommittee simply cannot allow DOE to continue to ignore this outrageous situation any longer.

III. ANALYSIS OF REFINERS NO. 2 DISTILLATE COSTS AND REVENUES: A CRITIQUE

It is no secret that DOE seems not to agree with our analysis and prognosis of heating oil prices. Its own Analysis, on the surface, presents a vastly different and far rosier picture.

The DOE Analysis, a tome of 125 pages of bewildering charts, data, and accompanying narrative, seems to contain the message that refiner prices are only nominally greater than the old price control system would have allowed.

For several good reasons, the Subcommittee should not be put off by this newest DOE quasi-apologia. First, as the Analysis confesses, it does not measure the equity or reasonableness of refiner prices; it only compares them to control levels. Second, the control levels are those under the old weak system now ineffectively jabbing (and generally missing) at gasoline prices. Yet, DOE now has the discretion to impose any type of controls it wishes. There is, accordingly, no rationale for looking at prices as though the old system were the only one available to DOE.

The final reason why the Subcommittee should be unimpressed with the Analysis is that many of the figures and methods used are inappropriate. In the first place, the amount of "overcharges" generated in the Analysis (as well as other numbers it uses) are only for nine refiners, not the entire refining sector, of which about 45% is omitted from the Analysis.

In the second place, the Analysis employs assumptions and methodologies which overstate refiners' legitimate costs by billions of dollars. Purchased product costs, for example, are counted for domestic as well as foreign purchases, ignoring the fact that domestic purchases constitute nearly all such costs and inevitably come from those other refiners which are not covered by the Analysis. Other refiner revenues offset entirely the domestic purchased product costs reported in the Analysis. Purchased product costs, by our estimate, are inflated in the Analysis by about $530 million and 6¢ per gallon. The Analysis has assumed these amounts to represent legitimate costs, while they instead represent overcharges.

In the third place, non-product costs, particularly those attributable to labor and materials, are reported in the Analysis to have risen an incredible 300% since decontrol. This compares to only 45% in the Nelson Index. The underlying reason for this discrepancy is a major inherent weakness in the Analysis. It allows millions of gallons of costs associated with unsold inventories to be credited to refiners' costs with no accompanying revenues or revenue estimates.

To explain what we mean, a hypothetical example is in order. Suppose in September, 1979, Refiner A purchases crude oil and then refines 100 gallons of No. 2 distillate out of that purchase. Suppose further that Refiner A's costs for the 100 gallons are 50¢ per gallon or a total of $50. Refiner A would, according to the Analysis, be allowed to place the $50 into its cost pool. Now suppose Refiner A sells only 25 gallons in October, for say, 90¢ per gallon, a very large markup. The Analysis would show $50 in costs and $22.50 in revenues, or an excess of costs of $27.50. The fact that the markup is too large is ignored. As long as inventories keep ahead of sales, this "inventory shell game" could continue. To deal with this problem, unsold gallons which have accrued costs should be subtracted from gallonage costs making up the pool.

Our rough estimate is that costs associated with 100 million barrels of inventory have been counted by the Analysis through the shell game methodology. If costs attributable to the 100 million barrels are subtracted from the cost pool, the pool then becomes an accurate gauge of costs and corresponding revenues. Assuming that the 100 million barrels have been purchased at $11 per barrel, the Analysis is off by $1.1 billion in costs; i.e. $1.1 billion should be transferred to the overcharge side of the Analysis estimate.

If the $1.1 billion in shell game funds is added to the $530 million in excess purchased product cost estimates, the Analysis begins to resemble CECA's overcharge estimates. And when these two are added to the Analysis' estimate of refunds, nearly $700 million, the resemblance becomes very very close.

The weaknesses in the Analysis do not stop even at this point. The Analysis also shows that the gasoline "tilt" which was supposed to allow gasoline prices to increase as an offset for distillate prices, did not work. Distillate prices were even higher vis a vis gasoline after the tilt. And, the Analysis also shows that refiners have subtly changed credit and other terms to their customers -- 4¢ per gallon which DOE's Analysis fails to account for (as does ours). It is easily conceivable that another $1 billion or more has been overcharged by refiners as a result of the tilt and changed terms.

C. Conclusion

When we add our estimate of $2.3 billion of overcharges to our $1.2 billion additional overcharges which will occur over the course of the winter, and then add on an extra $1 billion for the tilt and changed practices, we figure that there will be, by the end of March, nearly $5 billion in overcharges by refiners. Something terrible is taking place. Neither the Subcommittee nor the American consumer can brook DOE indifference to this situation.

IV. RECOMMENDATION

In our view, it is clear that DOE has both a moral and a legal obligation to reimpose price controls on No. 2 (home) heating oil and thereby roll back prices to cost-justified levels. Under § 12(g) of the Emergency Petroleum Allocation Act, controls may be reimposed when the objectives of the Act would best be served by such action. How the Act's objectives are being met by the present circumstances of refiner overcharging is a conundrum to which only DOE apparently has the answer. The fact that heating oil prices currently exceed cost-justified levels certainly refutes the notion that reimposition of controls would not significantly reduce prices. Considering that, and to continue heating oil overcharges which will amount to nearly $5 billion by the end of March, 1979, argues forcefully that something must be done to remedy the obvious problem.

We believe that a reasonable system of controls can be devised to bring prices back to cost-justified levels. Unfortunately, the sorry history of DOE's repeated failures to regulate the oil industry effectively, if at all, leads one to conclude that it would be quixotic at best to hope that DOE might order the reimposition of controls.

For this reason, I urge the Subcommittee to insist that, at the least, DOE adopt the recommendations made to ERA by OHA we mentioned earlier. This would ensure a hard, accurate and careful analysis of the present situation, and might signal to refiners that DOE will not continue to tolerate the abuses to which consumers have already been made subject.

If even this modest suggestion is too much for DOE to swallow, the Subcommittee will have no other recourse than to conclude that DOE does not give a damn about heating oil prices and is unprepared to take effective action to limit them regardless of how high and unjustified they become.

I appreciate the opportunity to testify before the Subcommittee on this important issue.

APPENDIX A

CONSUMER ENERGY COUNCIL OF AMERICA
MEMBER ORGANIZATIONS

Adams Electric Cooperative, Inc.
AFL-CIO
Allegheny Electric Cooperative, Inc.
Amalgamated Clothing & Textile Workers Union, AFL-CIO
American Federation of State, County, & Municipal Employees, AFL-CIO
American Federation of Teachers, AFL-CIO
American Public Gas Association
American Public Power Association
Association of Illinois Electric Cooperatives
Association of Texas Electric Cooperatives, Inc.
Basin Electric Power Cooperative
Central Power Electric Cooperative, Inc.
Citizen/Labor Energy Coalition
Consumer Federation of America
Cooperative League of the USA
East River Electric Power Cooperative, Inc.
Florida Electric Cooperatives Association
Hoosier Energy Division, Indiana Statewide Rural Electric Cooperative
Industrial Union Department, AFL-CIO
International Association of Machinists and Aerospace Workers, AFL-CIO
International Molders and Allied Workers Union, AFL-CIO
Kansas Electric Cooperatives, Inc.
Kansas Municipal Utilities
Lincoln (Nebraska) Electric System
Marine Engineers Beneficial Association
Maritime Trades Department, AFL-CIO
Minnesota Farmers Union
National Council of Senior Citizens
National Farmers Organization
National Farmers Union
National Rural Electric Cooperative Association
North Carolina Electric Membership Corporation
North Dakota Farmers Union
Northeast Missouri Electric Power Cooperative
Northeast Public Power Association
Northwest Iowa Power Cooperative
Northwest Public Power Association
Oil, Chemical and Atomic Workers International Union, AFL-CIO
Pennsylvania Rural Electric Association
Rocky Mountain Farmers Union
Service Employees International Union, AFL-CIO
South Dakota Farmers Union
South Texas Electric Cooperative, Inc.
Southside Electric Cooperative Inc.
Tennessee Valley Public Power Association
Texas AFL-CIO
Tillamook Peoples Utility District
United Auto Workers
United States Conference of Mayors
United Steelworkers of America, AFL-CIO
Valley Electric Cooperative
Washington Public Utility Districts' Association
Wisconsin State AFL-CIO

APPENDIX B

TECHNICAL SUPPORT DOCUMENT

Consumer Energy Council of America
Analysis of No. 2 Distillate Prices and Margins
With Special Focus on
The Department of Energy's Methodology

I. INTRODUCTION

Over the past year consumers have been alarmed to see the price of home heating oil leaping ahead four to five times the rate of inflation. The 32¢ per gallon price increase between October 1978 and October 1979 has generally been attributed to the Iranian revolution and subsequent OPEC price increases -- raising domestic crude oil prices 19¢ per gallon in the October 1978 to October 1979 period under study.

Yet OPEC may not be the only villain. At least one-third of the 32¢ per gallon increase in heating oil prices has resulted from higher refiner margins, which have ballooned 140% in the period from October 1978 to October 1979. In the wake of record oil industry profits, this analysis by the Consumer Energy Council of America (CECA) examines refiner margins to determine how much of this unprecedented 140% increase in gross margins is due to increased costs, and how much may be a result of profiteering by the refining industry -- an industry unleashed from price controls since June 1976.

According to CECA's analysis, refiners have charged consumers between $2.37 and $2.65 billion more than can be justified by increased costs or reasonable profits -- over $1.5 billion of this "overcharge" in the first ten months of 1979. In addition, a careful examination of several DOE studies, including a study released today, indicates that methodological weakness in the DOE approach has led it to underestimate overcharges. A rigorous comparison between CECA's approach and DOE's shows the disparity in total "overcharge" figures arises from a dubious accounting procedure used by DOE which eliminates from consideration nearly $1 billion in excess refiner revenues.

II. THE BIG BONANZA: ESTIMATING OVERCHARGES

A. Calculating a Cost-Justified Refiner Margin

The refiner margin is the gross markup refiners add to the purchase price of crude oil before reselling the oil as refined product. The margin includes both the operating costs of the refinery, such as labor, energy, chemicals, and construction, and also return on investment (profit).

We can estimate the increase in refining costs using a special inflation index, called the Nelson Refinery Operations Index, published quarterly in the Oil and Gas Journal. The monthly Nelson Index measures refining cost increases resulting from labor, energy, chemical, and capital investment costs, and costs from payment of dividends to shareholders.

Using the Nelson Index to estimate refinery costs, we can calculate a fair refiner margin -- justified by cost increases rather than unreasonable profits. This "cost-justified" margin is calculated using the refiner margin during the final month before heating oil prices were decontrolled -- June, 1976. For each subsequent month, the June 1976 margin of 4.6¢ per gallon is inflated by the corresponding increase in the Nelson Index for the month in question. This cost-justified margin is then compared to the actual margin imposed by refiners. Using this method, a monthly "overcharge" (or "undercharge") can be calculated based on cost increases applied to the June 1976 margin.

Total unjustified charges, if any, can be calculated by multiplying the per gallon "overcharge" for a given month by the total gallons of heating oil sold that month. The monthly overcharges are then combined to obtain the aggregate overcharge since heating oil prices were decontrolled in 1976.

The results of the analysis are shown in Table 1. While margins justified by increased costs never exceed 7.5¢ per gallon, actual refiner margins peak at 21¢ per gallon in September, 1979, creating overcharges as high as 14.5¢ per gallon. The total amount refiners have charged consumers in excess of what can be justified by costs and reasonable profit is $2.65 billion between June 1976 and October 1979. This "overcharge" figure is extremely conservative, since it excludes the 1979-80 heating season in which margin levels (and unjustified prices) appear to have soared to all-time highs.

B. Purchases of Refined Product by Refiners

It has been argued that the extraordinarily high margins of the past year are a result of costs incurred by refiners who bought heating oil from the expensive spot markets in order to build up their low heating oil inventories. Although refiners have historically purchased some refined product in order to build up stocks or meet excess demand, the prices on the spot market shot up dramatically in the wake of the Iranian Revolution.

Since nearly $1.6 billion of the total $2.65 billion in unjustified charges occurred in the ten months from January to October 1979, this contention could significantly reduce the overcharge estimates.

In order to take product purchase costs into account when calculating a cost-justified margin, we can no longer simply inflate the margin using the Nelson Index alone. The Nelson Index does not take into account the cost of purchased product. Thus, we must determine what percentage of the margin product purchases constitute and inflate that portion by the increase in spot market costs. The remaining portion can be inflated using the Nelson Index.

Since the Nelson Index does not account for purchased product cost, we must use a method of inflating the June 1976 base margin which incorporates the increased cost of purchasing heating oil from the spot markets.

It is easy to inflate a portion of the margin by the increase in spot market prices. The difficult task is to determine what percentage of the margin was devoted to product purchases. Once identified, this portion can be inflated by the increase in the cost of buying spot market product. The remaining portion of the margin -- which is affected only by standard cost increases -- can be inflated using the Nelson Index.

CECA calculated the percentage of the margin devoted to product purchases in a given month by computing a ratio between the cost of distillate imports and the total distillate sales for that month. Import costs are calculated by multiplying the total gallons imported by the New York spot market price for #2 heating oil. Total sales are calculated by multiplying total gallons of distillate product supplied by the average refiner selling price for #2 heating oil. This ratio represents the percentage of a given sales dollar (and therefore margin) used to purchase imported distillate.

With this ratio in hand, CECA repeats the basic procedure used earlier in this analysis to calculate cost-justified margins. We take the ratio of spot market purchases to total sales for a given month and split the 1976 base margin by that ratio. The portion devoted to spot market purchases is inflated by the percent increase in spot market prices. The remaining portion is inflated by the corresponding increase in the Nelson Index. The two portions are then combined to comprise an estimated margin justified by cost increases and product purchases.

It is important to note that our methodology is extremely generous to the industry, assuming that all product purchases were made from the high-priced spot market, rather than under far cheaper long-term contract prices.

The analysis incorporating product purchases appears in Table 2. Costs incurred from spot market purchases of imported product total $300 million in addition to the costs already estimated using the Nelson Index. This reduces the $2.65 billion "overcharge" figure by 11%. One hundred million dollars of these additional expenses are shown to have been incurred over January - October 1979. Thus, even taking spot market purchases into account, the analysis still shows that $2.37 billion in unjustified charges were levied on consumers between June 1976 and October 1979; $1.5 billion of this amount occuring during the ten months between January and October 1979.

Heating oil prices are far in excess of what could be justified by higher costs of crude oil, refinery operations, or spot market purchases. This leaves no conclusion but that the higher prices are the result of refiners widening their profit margins on an essential commodity during a period of short supply.

It is clear from this analysis that if price controls held heating oil prices down to cost-justified levels, consumers would be paying about 12.2¢ per gallon less this heating season than if overcharges continue at October 1979 levels. For the average household in a colder climate burning 1200 gallons a year, this would translate into nearly $150 in fuel bills overpaid to oil refiners.

III. METHODOLOGY AND MILLIONS: RECONCILING ESTIMATES OF OVERCHARGES

A. Introduction

One of the troubling aspects of the oil pricing controversy is the wide disparity among estimates of actual costs, actual profits, and real overcharges. We have presented our estimates and we are confident of their veracity within the limits of the data we have available. Our confidence in the accuracy of these estimates stems from the care we have taken to scrutinize other people's figures and from our ability to reconcile the differences. Having reconciled the disparities between our estimates and those of others, we believe that our methodology and assumptions are superior.

The most important set of alternative analyses are those conducted by the Energy Regulatory Administration (ERA) in its series of reports entitled Analyses of Refiner's No. 2 Distillate: Costs and Revenues. This series is of particular importance because 1) It constitutes ERA's device for monitoring the pricing of No. 2 heating oil, and 2) It includes industry-provided (though unaudited) data.

B. Difference in Estimates

CECA's estimate of overcharges runs roughly three times larger than those contained in ERA's analyses. Upon comparing our estimates with those of ERA, we have discovered two reasons for the difference.

1) First, this series of reports covers only nine refiners which account for 55% of the industry. Therefore,

if we assume that the remaining 45% of the industry behaves in a similar fashion to these nine refiners, we should just about double the overcharge figure. This involves a straightforward mathematical figure.

2) The second area of difference between the ERA analysis and the CECA analysis lies in the cost data. We believe that the data provided to ERA by the refiners overestimates costs in two ways. First, the claims for the increased cost of manufacturing are way out of line with the industry's highly respected Nelson Index, which is the basis for CECA estimates. Second, all purchased product is considered as an increased cost.

a) The inclusion of all purchased product as increased cost disregards the fact that a significant portion of the purchased product is acquired from domestic producers. As such, it will appear in revenue accounts of some domestic refiners. From an aggregate industry-wide point of view, purchased product provides a high-profit shell game. One firm bears a great deal of cost, some other firm shows a great deal of profit. The accounting procedures which ERA has applied to these nine firms has not compensated for this operation. Further, while this may seem to be only an accounting exercise which ERA has overlooked, it has an important concrete significance. Industry spokespeople typically use purchased product as a cover for high margins, but they fail to point out or admit that most of the purchased product is domestic in origin.

b) In order to reconcile our cost data with those of ERA, we must 1) estimate the difference between the two, 2) calculate the impact of these differences on refunds under the banking system of controls, and 3) extrapolate to the entire industry. In Table 1, we present these three analyses, using the gross margin figures provided in the most recent installment of the ERA analysis.

ERA gives an estimate of total increased purchased product in cents per gallon (column 1). In generating the CECA estimate of overcharges, we calculated an estimate of foreign purchased product in cents per gallon (column 2). Therefore, we can calculate domestic purchased product as the difference between the two (column 3). We consider all domestic purchased product as an overestimate in allowable expenses, since on an industry-wide basis they will wash out. Therefore, justifiable margins (ceiling margins in ERA terminology) must be reduced by this sum.

In order to calculate the overestimate of manufacturing costs, we have taken the June 1976 increased costs provided by ERA as justified. This is the same assumption used in our general analysis. Next, we apportion manufacturing costs between crude product (60%) and operating costs (40%). This distribution is the one cited by ERA. We know the inflation rate of the crude product component, since it follows the rate of inflation of crude oil (column 5). The difference between total increased manufacturing costs (column 4) and the crude product component of manufacturing costs (column 5) gives the size of the implicit increase in operating costs (column 6). In column 7, we calculate the Nelson-justified increase in operating costs. The difference between the Nelson-justified increase in operating costs and the implicit increase in the ERA figures gives us the overestimate of manufacturing costs (column 8). The total overestimate of increased costs is the sum of domestic purchased product and overestimated manufacturing costs. This is given in column 10.

C. Calculating the Impact of Differences on Overcharges

In order to calculate the impact of these adjustments on refunds (overcharges), we would reduce the justified increased costs, or ceiling margins, by the total overestimate. Next, we compare actual margins to ceiling margins. We might call the result the "bank" margin. In order for the adjustment to cause an increase in refunds, it would have to either create a negative "bank" margin (excess of actual margin over ceiling margin) or create an increase in an already negative one. Moreover, this increased negative bank margin would have to be coupled in sequence with at least one other negative "bank" margin (i.e. the 30 day negative bank rule). This does not reproduce the ERA banking/refund calculation exactly, but we believe it simulates it quite closely.

The results of the adjustments are shown in column 11. In 14 of the 39 months the adjustment has created a negative bank. In eight other months, it has increased an already negative bank. Of the 22 months where the adjustment has an impact, 19 would lead to increased refunds. The estimated magnitude of these increased refunds (calculated by multiplying the per gallon negative margin by the total gallons sold in that month)* is given in column 12.

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* While one might argue that we ought to multiply by only the refiners' share of total sales (55%), we have chosen to multiply by total sales for two reasons. First, the aggregate overcharge figures (which these simulate) have generally run much lower than the company-by-company figures. In fact, they have been, on average, 38% lower. The reason is that on an aggregate basis the 30 day negative bank rule becomes much more important. That is, individual companies have a good deal more difficulty avoiding 30 day negative banks than do aggregates. On this basis alone, one could argue that the 45% overestimate in the figures column 12 would be largely offset by the 38% expected increase in company-by-company refunds. Second, the 45% of the industry which is receiving revenue from the domestic purchased product would have an especially difficult time in avoiding negative banks. Their actual margins are a good deal higher than those of the nine refiners under study. To simplify matters, we have assumed that the overcharge represented in the adjustments is an industry average per gallon sold. This would seem to be a fair and conservative estimate.

The results of the effort to reconcile two sets of analyses are presented in Table 2. The important point is that these two adjustments go a long way toward reconciling the differences in the CECA and ERA estimates of overcharges. Let us work through the October 1979 figures as an example.

1) ERA calculates $697 million in overcharges. Extrapolating to the entire industry, this represents $1.237 billion.

2) CECA estimates an adjustment of $826 million based on different cost data.

3) Adding these together, we get an estimated overcharge of $2.03 billion, which is fairly close to CECA's own estimate of $2.37 billion. In fact, the two estimates differ by on 12%.

If we examine the other points in time for which ERA has calculated estimated overcharges, we find that after adjustment, they come quite close to CECA's. The largest difference is 15% and the average difference is only 9%.

This exercise should serve two purposes. First, it should point out some alternative approaches to be pursued in monitoring prices. One cannot simply ask the industry for cost data and take it at face value. The industry data imply a rate of inflation in operating costs, such as labor, maintenance, insurance, etc. of 300%, which is inordinately out of line with reality. Further, domestic purchased product needs to be looked into carefully since it is so frequently used as an excuse for justifying skyrocketing prices and there is reason to believe it is misleading at best. Second, it should be clear that we are talking about very large sums of money. By October 1979, the sum would seem to be at least $1.2 billion and probably in excess of $2 billion. That was before prices and margins began rising even more precipitously. We are certain that the next installment will be into the three billion dollar category. We ought not let minor differences in methodology obscure the tremendous burden that these excess profits are placing on the American consumer.

IV. THE PAST IS PROLOGUE: EXTRAPOLATING TRENDS FOR THIS HEATING SEASON

Having seen that the overcharges are of staggering proportions and having noted that they were growing alarmingly in the months leading up to October 1979, we would be remiss if we did not attempt to extend our analysis through this winter's heating season. The greatest excesses in refiner margins typically occur in the winter months. Furthermore, ERA had expected the overcharges to ease in the fall when inventories were being built up, but they did not. We suspect, and the recent trends in prices seem to suggest, that the pattern of overcharges continued over the winter.

To project the total overcharge for the 1979-1980 heating season, CECA shall simply assume that the rate of overcharge calculated for October (12.2¢) held throughout the winter. This is extremely generous, since prior trends would indicate that it would be likely to increase. We multiply the per gallon overcharge by the number of gallons sold in a mild winter. Mild winters are roughly 13% below average in terms of the number of gallons consumed. The results of this analysis are presented in Table 5. For the five month heating season from November 1979 to March 1980, we estimate an additional overcharge of $1.2 billion. This translates into a $75 per household overcharge this heating season alone. This adds roughly an additional 50% to the overcharges we estimated in the prior three years. Extrapolating through this season would bring the total overcharge to $2.5 billion and could result in a total rebate of almost $250 per household.

V. APPLES AND ORANGES: GASOLINE PRICES AND HEATING OIL MARGINS

One of the most insidious arguments put forward against coming to terms with the rapid rise in home heating oil prices is the suggestion that controls wouldn't matter much. This argument is typically based on a comparison between the behavior of home heating oil prices and the behavior of gasoline prices, with the central assertion being that the two have not been all that different. The argument is misleading in two respects.

1) Home heating oil prices (decontrolled) have increased considerably faster than gasoline prices (controlled). Between June 1976 and October 1979, home heating oil prices increased 103%. In the same period, gasoline prices, net of taxes, increased 84%. Perhaps a difference of twenty percentage points is not much to the industry or DOE, but it matters to the consumer.

2) If we look at the components of price increases, we find that the increase in the refiner margins for home heating oil has outpaced the increase in the margins for gasoline by far. As Table V depicts, the margin for gasoline increased "only" 130% between June 1976 and October 1979. Over the same period, the margin for home heating oil increased 326%. The industry is fond of pointing out that there were only a few pennies difference between the margins. However, as everyone knows (and the industry frequently points out in other contexts) it is the rate of profit (defined in this case by the margin) that counts, not the absolute size of the number.

With home heating oil prices increasing at almost three times the rate of gasoline margins, pointing to the absolute size of the margins is pure chicanery. To put the difference in another light, if we assume that the industry behaved in regard to gasoline as it has behaved with respect to heating oil and increased the margin of gasoline at the same rate as they have increased the margin on home heating oil, we would be paying roughly 20¢ more per gallon. Certainly 20¢ per gallon matters to the consumer.

VI. THE PROMISE AND THE PITY:
FEA EXPECTATIONS AND THE BURDEN OF HOME HEATING OIL BILLS

In 1976 the Federal Energy Administration (FEA) told the Congress that, with decontrol, heating oil prices to consumers would rise only as much as increases in crude oil costs (and therefore less than they could theoretically rise under the then-existing system of controls). This assurance was necessary since, under the Emergency Petroleum Allocation Act, the President cannot effect decontrol unless there is a finding that "... competition and market forces are adequate to protect consumers and that exempting such oil or refined product category will not result in inequitable prices for any class of users of such oil or product." (EPAA, sec. 12 (d) (1)).

The FEA's prediction, upon which Congress based its approval of middle distillate decontrol, had little grounding in reality. Heating oil prices rose nearly 150% above increases in crude oil during the first 12 months following decontrol.

Since June 1976 heating oil prices have risen each month further and further in excess of crude oil increases. For consumers, the difference between FEA's starry-eyed prediction and current reality totals nearly $5 billion in additional payment for home heating oil since June 1976. By the end of this month, the total bill could almost be $2 billion more than FEA predicted. The results of this analysis are presented in Table 6.

TABLE I

Cost-Justified Margins Using Nelson Index as Inflation Factor

	Crude Oil Acquisition Cost (¢/gallon)	Refiner Selling Price (¢/gallon)	Refiner Margin (¢/gallon)	Nelson-justified Margin (¢/gallon)	"Overcharge" (¢/gallon)	Billions of Gallons Sold	Monthly Overcharge (millions of $)
1976							
June	25.9	30.5	4.6	4.6	0	1.35	0
July	26.1	30.9	4.8	4.6	.2	1.29	2.6
August	25.7	31.0	5.3	4.6	.7	1.28	9.0
Sept.	26.4	31.2	4.8	4.7	.1	1.45	1.4
Oct.	26.7	31.7	5.0	4.7	.3	1.74	5.2
Nov.	26.8	32.5	5.7	4.7	1.0	2.06	20.6
Dec.	27.0	33.6	6.6	4.7	1.9	2.66	50.4
1977							
Jan.	27.7	34.7	7.0	4.9	1.3	2.92	61.3
Feb.	28.1	35.4	7.3	4.9	-1.0	2.44	-58.5
March	28.3	35.9	7.6	5.0	.2	1.97	51.2
April	28.0	35.8	7.8	5.1	2.7	1.63	44.0
May	28.3	35.7	7.4	5.0	2.4	1.59	38.1
June	28.5	35.7	7.2	5.1	2.2	1.54	32.3
July	28.3	35.8	7.5	5.1	2.3	1.44	35.0
August	28.6	35.7	7.1	5.1	2.0	1.51	30.2
Sept.	28.6	35.5	6.9	5.1	1.8	1.50	27.0
Oct.	28.9	36.0	7.1	5.2	1.9	1.74	33.0
Nov.	29.0	36.3	7.3	5.2	2.0	1.90	39.9
Dec.	29.2	36.6	7.4	5.2	2.0	2.41	53.0
1978							
Jan.	28.9	36.8	7.9	5.3	2.5	2.46	63.9
Feb.	29.0	36.4	7.4	5.4	2.0	2.33	46.6

TABLE I continued

Cost-Justified Margins Using Nelson Index as Inflation Factor

	Crude Oil Acquisition Cost (¢/gallon)	Refiner Selling Price (¢/gallon)	Refiner Margin (¢/gallon)	Nelson-justified Margin (¢/gallon)	"Overcharge" (¢/gallon)	Billions of Gallons Sold	Monthly Overcharge (millions of $)
1978 (cont'd)							
March	29.1	36.2	7.1	5.3	1,7	2,27	40,8
April	29.0	36.0	7.0	5.4	1.6	1,66	36.5
May	29.4	36.2	6.8	5,3	1,5	1,71	25,6
June	29.7	35.8	6.1	5,4	,7	1,52	10,6
July	29.6	35.9	6.3	5.4	.9	1,39	12,5
August	29.7	36.1	6.4	5,4	1,0	1,55	15,5
Sept.	29.9	36.9	7.0	5,4	1,5	1,42	22.7
Oct.	30.0	38.1	8.1	5,4	1,6	1.70	45.9
Nov.	30.4	39.4	9.0	5.5	3.3	1,91	66.8
Dec.	30.8	40.1	9.3	5.5	3.5	2.29	87.0
1979							
Jan.	31.2	40.9	9.7	5.6	3.9	2.51	102.9
Feb.	32.0	43.1	11.1	5.7	5.2	2.38	124.2
March	32.6	45.8	13.2	5.8	7.1	2.00	148.0
April	34.6	48.3	13.7	6.0	7.5	1.61	123.9
May	36.7	53.2	16.5	6.1	9.1	1.65	155.1
June	40.5	58.8	18.3	6.1	11.2	1.45	176.9
July	44.2	62.5	18.5	6.2	11.0	1.41	173.4
August	47.0	65.7	18.7	6.3	11.4	1.53	189.7
Sept.	48.0	69.0	21.0	6.5	14.3	1.36	197.2
Oct.	49.3	68.6	19.6	6.6	12.2	1.58	205.4

Source: Department of Energy, Monthly Energy Review, January 1980.
Oil and Gas Journal, January 1980.

Total Overcharge -
[illegible] billion

Overcharge Jan-Oct 1979
$1.6 Billion

TABLE II

Cost-Justified Margin Inflated using Nelson Index and Adjusted for Product Purchases

	Actual Refiner Margin	Spot Purchases as % of Total Sales Ratio of Purchased Product Costs to Total Sales	% Increase in Spot Market Prices Since June 1976	% Increase in Nelson Index	Cost-Justified Margin	Per-Gallon Overcharge	Total Monthly Overcharge (Millions of $)
1976							
June	4.6	6	0	0	4.6	0	0
July	4.8	6	0	0	4.6	.2	2.5
August	5.3	6	0	1	4.6	.7	8.9
Sept	4.8	6	0	2	4.7	.1	1.4
Oct	5.0	5	0	3	4.7	.3	5.2
Nov	5.7	4	0	3	4.7	1.0	20.6
Dec	6.6	4	41	2	4.8	1.8	50.5
1977							
Jan	7.0	8	207	7	5.7	1.3	61.3
Feb	7.3	17	441	7	8.3	-1.0*	58.5
March	7.6	16	339	9	7.4	.2	51.2
April	7.8	5	17	10	5.1	2.7	44.0
May	7.4	3	0	9	5.0	2.4	38.1
June	7.2	5	1	10	5.0	2.2	32.3
July	7.5	7	48	11	5.2	2.3	35.0
August	7.1	6	24	11	5.1	2.0	30.2
Sept	6.9	6	27	11	5.1	1.8	27.0
Oct	7.1	5	18	12	5.2	1.9	33.0
Nov	7.3	5	45	13	5.3	2.0	39.9
Dec	7.4	5	83	13	5.4	2.0	53.0
1978							
Jan	7.9	4	57	15	5.4	2.5	63.9
Feb	7.4	4	46	17	5.4	2.0	46.6
March	7.1	5	54	16	5.4	1.7	40.8
April	7.0	3	0	18	5.4	1.6	26.5
May	6.8	4	0	16	5.3	1.5	25.6
June	6.1	5	12	17	5.4	.7	10.6
July	6.3	6	18	17	5.4	.9	12.9
August	6.4	5	17	17	5.4	1.0	15.5
Sept	7.0	6	35	18	5.5	1.5	22.7

TABLE II continued

Cost-Justified Margin Inflated Using Nelson Index and Adjusted for Product Purchases

	Actual Refiner Margin	Spot Purchases as % of Total Sales Ratio of Purchased Product Costs to Total Sales	% Increase in Spot Market Prices Since June 1976	% Increase in Nelson Index	Cost-Justified Margin	Per-Gallon Overcharge	Total Monthly Overcharge (Millions of $)
1978 cont'd							
Oct	8.1	6	59	18	5.6	1.6	45.9
Nov	9.0	7	103	19	5.7	3.3	66.8
Dec	9.3	6	138	19	5.8	3.5	87.0
1979							
Jan	9.7	5	127	21	5.8	3.9	102.9
Feb	11.1	5	115	23	5.9	5.2	124.2
March	13.2	6	124	26	6.1	7.1	148.0
April	13.7	6	98	30	6.2	7.5	123.9
May	16.5	11	286	32	7.4	9.1	155.1
June	18.3	10	257	33	7.1	11.2	176.9
July	18.5	11	286	35	8.5	11.0	173.4
August	18.7	9	274	38	7.3	11.4	189.7
Sept	21.0	6	111	41*	6.7	14.3	197.2
Oct	19.6	8	268	43*	7.4	12.2	205.4

Total Overcharge: $2.37 billion

Overcharge Jan - Oct 1979: $1.5 billion

* Projected using trend-line analysis of previous data.

Source: Department of Energy, Monthly Energy Review, January 1980.
Department of Energy, Weekly Petroleum Status Report, January 25, 1980.
Oil and Gas Journal, January 1980.

TABLE III

COST DIFFERENCE BETWEEN THE ERA AND CECA ANALYSES AND THEIR IMPACT ON OVERCHARGES

	Purchased Product Cents Per Gallon			Increased Manufacturing Expenses Cents Per Gallon					Total Over-Estimate (9) Cents Per Gallon	ERA Ceiling Margins Minus Actual (10)	Adjusted Negative Margin (11)	Estimated Additional Overcharge (12)	
	(1) Total	(2) Foreign	(3) Domestic	(4) Total Cost Increase	(5) Justified Crude Product Increase	(6) Implicit Operating Cost Increase	(7) Nelson Justified Operating Cost Increase	(8) Over-Estimate of Operating Cost Increase				Monthly	Running Total
1976													
June	.6	0	.6	2.4	1.4	1	1	0	.6				
July	1.8	0	1.8	2.4	1.4	1	1	0	1.8	2.7			
August	.9	0	.9	2.4	1.4	1	1	0	.9	1.6			
Sept	1.0	0	1.0	2.7	1.4	1.3	1.03	.27	1.27	1.6			
Oct	.7	0	.7	2.4	1.4	1	1.03	(.03)	.67	1.3			
Nov	.4	0	.4	2.4	1.4	1	1.03	(.03)	.37	1.0			
Dec	.4	.1	.3	2.6	1.5	1.1	1.02	.08	.38	(.3)	(.7)		
1977													
Jan	2.3	.8	1.5	2.7	1.5	1.2	1.07	.13	1.63	2.4			
Feb	2.1	2.1	0	2.8	1.5	1.3	1.07	.22	.22	1.7			
March	5.0	2.4	2.6	3.0	1.5	1.5	1.09	.41	3.01	4.9			
April	3.5	0	3.5	3.2	1.5	1.7	1.1	.60	4.1	4.0			
May	.9	0	.9	3.2	1.5	1.7	1.1	.60	.69	0	(.1)	1.6	
June	.6	0	.6	3.2	1.5	1.7	1.1	.60	.66	.6	(.7)	23.9	
July	.7	.1	.6	3.5	1.5	1.7	1.11	.59	1.19	.5	(.1)	10.8	
August	1.0	0	1.0	3.2	1.5	2.0	1.11	.89	1.89	1.4	(.7)	17.5	
Sept	1.0	0	1.0	3.3	1.5	1.7	1.12	.58	1.58	1.4	(.5)	3.0	
Oct	.4	0	.4	3.1	1.5	1.6	1.13	.47	.87	(.3)	(.2)	3.0	
Nov	.6	.1	.5	3.1	1.6	1.5	1.13	.37	.87	.2	(1.2)	22.6	
Dec	.3	.2	.1	3.3	1.6	1.7	1.13	.37	.47	.9	(.7)		
1978													
Jan	.7	.1	.6	3.5	1.6	1.9	1.15	.75	1.35	0	(1.4)	32.0	
Feb	.9	0	.9	3.4	1.6	1.8	1.17	.63	1.53	1.0	(.5)		
March	.5	.1	.4	3.6	1.6	2.0	1.16	.84	1.24	1.5			

TABLE III

COST DIFFERENCE BETWEEN THE ERA AND CECA ANALYSES AND THEIR IMPACT ON OVERCHARGES

	Purchased Product Cents Per Gallon			Increased Manufacturing Expenses Cents Per Gallon					Total Over-Estimate (9) Cents Per Gallon	ERA Ceiling Margins Minus Actual (10)	Adjusted Negative Margin (11)	Estimated Additional Overcharge (12)	
	(1) Total	(2) Foreign	(3) Domestic	(4) Total Cost Increase	(5) Justified Crude Product Increase	(6) Implicit Operating Cost Increase	(7) Nelson Justified Operating Cost Increase	(8) Over-Estimate of Operating Cost Increase				Monthly	Running Total
1978 cont'd													
April	1.0	0	1.0	4.0	1.6	2.4	1.18	1.22	2.22	2.3			
May	.9	0	.9	3.9	1.6	2.3	1.16	1.14	2.04	2.4			
June	.5	0	.5	3.7	1.6	2.1	1.17	.93	1.43	2.0			114.0/
July	.7	0	.7	3.6	1.6	2.0	1.17	.83	1.53	2.5			
August	1.5	0	1.5	3.6	1.6	2.0	1.17	.03	2.33	2.9			
Sept	2.0	.1	1.9	3.7	1.6	2.2	1.18	1.02	2.92	3.6			
Oct	1.3	1.1	.2	3.6	1.6	2.0	1.18	.82	1.02	1.5			
Nov	1.1	.2	.9	3.6	1.6	2.0	1.19	.81	1.71	2.0			
Dec	1.5	.3	1.2	3.6	1.7	1.9	1.19	.71	1.91	.6	(.3)	27.5	141.9/
1979													
Jan	2.1	.2	1.9	3.8	1.7	2.1	1.21	.89	2.79	1.6	(1.2)	32.6	
Feb	2.1	.2	1.9	3.9	1.7	2.2	1.23	.97	2.87	0			
March	3.3	.3	3.0	4.6	1.8	2.8	1.26	1.54	4.54	0	(2.9)	66.7	
April	3.5	.2	3.3	4.6	1.9	2.7	1.30	1.40	4.70	(.2)	(4.9)	90.0	
May	1.7	.3	1.4	4.7	2.0	2.7	1.32	1.30	2.70	(4.4)	(6.2)	46.2	
June	1.5	1.0	.5	5.1	2.2	2.9	1.33	1.57	2.07	(5.7)	(7.8)	30.5	403.6/
July	4.4	1.3	3.1	4.8	2.4	2.4	1.35	1.05	4.15	(3.9)	(8.0)	39.2	
August	3.0	1.0	2.0	5.0	2.5	2.5	1.38	1.12	3.12	(5.0)	(8.1)	47.4	
Sept	7.1	.2	6.9	5.5	2.6	2.9	1.41	1.49	8.39	(.1)	(8.5)	114.2	
Oct	7.0	.8	6.2	5.6	2.7	2.9	1.43	1.47	7.67	.1	It (7.8)	121.7	826.1/

TABLE III

NOTES AND SOURCE BY COLUMN

(1) U.S. Department of Energy, Energy Regulatory Administration, "Analysis of Refiners' No. 2 Distillate Costs and Revenues: July 1976 - October 1979, Draft Report, February 1980. (Hereafter cited as "ERA Analysis")

(2) See Tables 1 and 2. This is the difference between the Nelson-justified margin in Table 1 and cost-justified margin in Table 2.

(3) 1 minus 2.

(4) ERA Analysis, Table 111-3, col. 1, p. 58.

(5) Based on crude product as 60% of manufacturing cost. June 1976 is taken as justified. Thereafter inflated by Table 1, col. 1.

(6) 4 minus 5.

(7) June 1976 is taken as justified. Thereafter inflated by Nelson-justified rate in Table 2.

(8) 6 minus 7.

(9) 3 plus 8.

(10) ERA Analysis, Table 111-4, col. 3, p. 60.

(11) 10 minus 9.

(12) 11 multiplied by total sales per month from Table 1.

TABLE IV

Reconciling the ERA and CHCA Estimates of Overcharges
($ Million)

	Estimated Overcharge 9 Refiners	Estimated Overcharge Whole Ind. (2-1 ÷ .55)	Cost Based Increase in Overcharge	Total Adjusted Bank Based Overcharge	CHCA's Estimated Overcharge	4 ÷ 5
May 1978	301	547	114	661	629	1.05
Dec 1978	328	596	142	738	870	.85
June 1979	607	1103	484	1584	1663	.95
Oct 1979	697	1267	826	2030	2370	.86

TABLE V

INCREASES IN REFINER MARGINS
(cents per gallon)

	June 1976	October 1979	¢/gallon Increase	% Increase
Gasoline	10.1¢	23.0¢	12.9¢	130%
Heating Oil	4.6	19.6	15.0	326

Source: Department of Energy, Petroleum Product Price Report, Oct. 1979.

TABLE VI

Excess Heating Bill on the Basis of Crude Cost

	Crude Cost Increase (¢/gallon)	Justified Price (¢/gallon)	Monthly Excess Heating Cost (¢/gallon)	Total ($ million)
1976				
June	0	39.3	0	0
July	+.2	39.5	-.2	-2.58
August	-.4	39.1	.7	8.96
Sept	.7	39.8	.4	5.80
Oct	.3	40.1	.6	10.44
Nov	.1	40.2	1.7	35.02
Dec	.2	40.4	2.6	69.16
1977				
Jan	.7	41.1	3.3	96.36
Feb	.4	41.5	3.8	92.72
March	.2	41.7	4.1	80.77
April	-.3	41.4	4.5	73.35
May	.3	41.7	4.0	63.60
June	.2	41.9	3.8	58.52
July	-.2	41.7	4.1	59.86
August	.3	42.0	4.0	60.40
Sept	0	42.0	4.2	63.0
Oct	.3	42.3	4.4	76.56
Nov	.1	42.4	5.2	98.80
Dec	.2	42.6	5.3	127.73
1978				
Jan	-.3	42.3	6.2	157.52
Feb	.1	42.4	6.2	144.46
March	.1	42.5	6.1	138.47
April	-.1	42.4	6.2	102.92
May	.4	42.8	5.5	94.05
June	.3	43.1	5.1	77.52
July	-.1	43.0	5.2	72.28
August	.1	43.1	5.1	79.05
Sept	.2	43.3	6.7	95.14
Oct	.1	43.4	6.8	115.60
Nov	.4	43.8	7.7	147.07
Dec	.4	44.2	8.4	192.36
1979				
Jan	.4	44.6	9.1	228.41
Feb	.8	45.4	11.0	253.0
March	.6	46.0	12.8	256.0
April	2.0	48.0	13.1	210.91
May	2.1	50.1	14.1	232.65
June	3.8	53.9	15.2	220.40
July	3.7	57.6	16.2	225.42
August	2.8	60.4	18.0	275.40
Sept	1.0	61.4	19.6	266.56
Oct	1.0	62.4	19.8	312.84
				4974.50

- June 1976 refiner and crude prices

- % increase in Nelson

Mr. MOFFETT. If I might ask just a couple of questions that do not relate to yesterday's hearings, since I believe we talked that one to death. First, on gasoline. I have a perception that there is a contradiction in the targets that were set under the S. 1030 which were generally regarded as soft and then the standby plan, Federal emergency gasoline conservation plan which was generally regarded as very tough. Am I wrong? Does a contradication also exist in monetary levels for these programs? And if it does, what kinds of targets can we expect to see and when can we expect to see them?

Ms. ROLLINS. You recognize, Mr. Chairman, that the responsibility for implementing both the voluntary gasoline target and the mandatory program rests with the Office of Conservation. As I indicated last week, I have had some familiarity with the efforts to develop voluntary targets through the month of December but have not this month nor in the month of January had any involvement with the program. It is my view that the targets were set for purposes of discussing the methodology at a reasonable level. I quite frankly have no idea what has gone on in the ensuing month and a half.

Mr. MOFFETT. You have responsibility for rationing, don't you?

Ms. ROLLINS. The ERA is responsible for implementing the rationing plan. It does seem under the circumstance, since the relationship with the States tends to exist on a day-to-day basis, in the Office of Conservation Applications, a realistic assignment to make in view of the regional responsibilities flowing from the Office of Conservation to the States.

Mr. MOFFETT. In recent years, though, wasn't ERA the part of the Department that analyzed programs like the sticker plan, the Italian plan, and so forth?

Ms. ROLLINS. The ERA had inherited that responsibility. You may recall that the staff we had to undertake that endeavor was limited, to say the least. Since the focus for the early programs that were being discussed with the States was really on motor gasoline and there was some capability and ability, it was considered an appropriate assignment, Mr. Chairman.

Mr. MOFFETT. What happened to the people who did develop some expertise? I don't recall who they were but I do recall when we were exploring the different options at the time gas lines were coming eastward from California, there were some people in ERA who were fairly knowledgeable. What happened to those people?

Ms. ROLLINS. Those seven people continue to work on the gasoline rationing plan. You might be referring to Barry Yaffe who early on had some responsibility for the first gasoline rationing plan back in 1975. He has gone to another area in EIA where he is working on our attempt to set up lines between the States to establish day-to-day communication during energy emergencies. I think that is an appropriate assignment for Barry. Maybe the deal is after you have been in emergency planning for 4 years you ought to be allowed to do something else.

Mr. MOFFETT. As you may know, I, and I think other members of the subcommittee, want to be in support of a strong conservation plan and have been all the way through. But I want to say I'm not sure the division of labor makes some sense. I am not sure that we should not be putting those people together in some way rather than having them split.

The second question is in the area of nuclear energy. How do you view the ERA's expertise in the nuclear area with regard to all the relative merits, the pros and cons, the costs of nuclear power, the safety questions?

Ms. ROLLINS. We have a very fine, professional, and experienced staff in the Office of Utility Systems. The Assistant Administrator is Jerry Pfeiffer. The staff of technicians and engineers who work for him represent a very fine, though small, cadre who are quite capable to answer some of these questions which you wish to set forth.

Mr. MOFFETT. You say small staff. How small is that outfit? Give us a figure.

Ms. ROLLINS. The Office of Utility Systems has several functions.

Mr. MOFFETT. How many people are working on nuclear on a full-time basis?

Ms. ROLLINS. We have no people dedicated to nuclear on a full-time basis. We are, from time to time, called upon by the NRC and sometimes by the Office of the Secretary to do some analytical work which basically relates to liability.

Mr. MOFFETT. You go a little farther than that. You have intervened in utility rate cases if I am not mistaken. For example, in my State of Connecticut, did not ERA intervene in a rate case involving a future nuclear plant?

Ms. ROLLINS. The former Administrator did appear in a proceeding. The ERA has appeared at no subsequent proceeding, however.

Mr. MOFFETT. Was the Connecticut case the only instance in which you intervened?

Ms. ROLLINS. To my knowledge that was the only case.

Mr. MOFFETT. Do you have plans for any further intervention?

Ms. ROLLINS. We have no current plans to intervene in any cases.

Mr. MOFFETT. My recollection of PURPA is that it was not really our intent to have ERA people zipping around the country plugging nuclear power despite what may be the merits of backing out oil facilities and replacing imported oil. So I am glad to hear that that is not going to be any kind of priority.

The gentleman from Michigan wishes to be recognized.

Mr. STOCKMAN. One thing that is kind of curious to me in the breakout of the request for next year is that for fuels regulation I presume that has to do with petroleum regulation, is that right?

Ms. ROLLINS. Yes.

Mr. STOCKMAN. You show an increase in the request, but I thought we were in the process of deregulating. Why would you need more funds if by the end of fiscal year 1981 the act will expire?

Ms. ROLLINS. The budget line item "Fuels regulation" really refers to the Office of Petroleum Operations. That is the office that is responsible for maintaining and operating the allocation programs that exist with regard to crude oil and products still under control. Like it or not, our experience from last summer showed us that, while we continue to make our budget assumptions or build them upon an assumption that we will be out of business, every regulation change brings with it a need to settle on the marketplace.

As an example, in the area of gasoline allocations alone, we had some 32,000 applications for some allocation assistance or adjustments simply flowing from the regulation change which we thought would permit us to move closer to reality in terms of a historical base period. As long as we are in the business, my judgment is that we will need the people to adequately maintain the program and the fuel to serve the people who continue to be regulated.

Mr. **Stockman**. You say as long as we are in the business. As I understand it the Department does have support to actually decontrol gasoline prices and allocation. In that regard, I notice your table I, "Total Office of Hearings and Appeals Input and Output 1979." [See p. 517.] It sounds as if we have the regulatory machine to the point where it is running like a mass production factory and even at the end of some months you had an inventory of 10,000 cases. Does that not suggest that you ought to move to remove that whole system and save a little money and let the marketplace handle this?

Ms. **Rollins**. Under the statute we are forced to examine some criteria which would allow us to attest that supply was adequate. After this winter and as we look into the spring, I don't believe at the moment we can begin to make the findings that are required under the statute. It is my belief, that when the situation presents itself, we will make our findings under the statute. If all the factors meet the test, of course, I would like to look forward to getting us out of the business. But that situation does not exist yet.

Mr. **Stockman**. We have been hearing that for 3 years and usually there is an anticipated shortage 3 months down the road or there was one 6 months behind. There might be one at the present time but we don't know. Do you think the conditions would ever rise where you could meet the statutory test? The act is going to expire in 1981. You propose that if Congress does not extend the act you will just cold turkey the whole system in 1 month?

Ms. **Rollins**. No. As I indicated in my opening statement, my view is that one has to have, and we certainly plan for it, a phaseout as gently as possible and without shocks. That is not an easy thing to do.

Mr. **Stockman**. That is exactly what I am asking about. It is easy to do on crude oil price controls because you have ceilings that are moving up but in the market you have a highly integrated process of allocations and buyer-seller relationships and so forth. How do you propose to get out from under that given the fact that the clock is running out and you only have less than 2 years left at the present time, 20 months?

Ms. **Rollins**. At this moment I am not prepared to discuss in detail how we plan to get out of it. I think in about a month I can appear before you and discuss those issues with some degree of intelligence.

Mr. **Stockman**. Well, we will be looking forward to that.

Ms. **Rollins**. Thank you, sir.

Mr. **Stockman**. I notice that on the coal conversion program you are now up to 30 million and you are building up huge backlogs and you expect the backlog would be worked off by fiscal year 1986. Is the Department having any second thoughts about the basic premise of those programs; namely, that there is a great deal of coal conversion that would take place that is not taking place and that all we need is a little regulatory prodding or conversion orders to move the market along at a faster pace? It seems to me $21 million of consultant studies, $30 million for the whole program, a huge backlog is building up, tons of requests for exemptions and so forth. This program is just churning a lot of money and a lot of hearings and a lot of paperwork but is really not making a very significant showing in terms of fuel consumption out in the market. Do you have any doubts whether this experiment is worth pursuing?

Ms. ROLLINS. I don't have any doubts today. Again, I think what is needed is a little more time to implement the program before we can judge its effectiveness. Of the exemption requests received to date, a great number of them relate to the special public interest exemptions. They amount to more than a thousand cases.

When we began to really draw the concepts for the full program, we had understood that there was a tremendous requirement for the kind of analytical work that would permit us to again meet the tests under both the economic considerations and the environmental considerations. We never fooled ourselves with regard to the work that had to be done.

Mr. STOCKMAN. Well, on the request for environmental exceptions what is your standard if EPA refuses to grant a permit? Is that a prima facie indication that an exception would be in order?

Ms. ROLLINS. I would like Bob Davies, who is the assistant administrator for our fuel use program, to respond to that question.

Mr. DAVIES. There are two appropriate tests that should be considered. One is the cost test where the project should be granted an exemption on an economic basis and one is an environment test.

The proposal that a particular firm may have submitted to EPA may not have been the best available technology that they could have included and, therefore, EPA by not approving a particular project, does not necessarily mean that that project should not be coal capable or wood capable. The project the company submitted to EPA and the EPA denial is not necessarily evidence that they qualify for the final exemption. There may, in fact, be control that could be added to that system and permitted to succeed.

The reason I mentioned the cost test is that it is, if in fact, they can meet the environmental requirements but it would be too costly.

Mr. STOCKMAN. How do you do this second guessing on EPA in terms of best available control technology? They have been engaged in the last couple years in a very extensive development as to just what that standard means in a whole variety of industries and fuel use situations.

Mr. DAVIES. There is no second guessing. If, in fact, they did propose the equipment and the regulatory body found that that would not be sufficient, then we would agree with them.

Mr. STOCKMAN. But what you are saying is that the entire policy control here with the EPA, if EPA decides that their mission is technology forcing and they are going to make applicants come back time after time after time to devise some more effective technology that you will rest content with that and not let it interfere with the coal consumption directives of your agency, is that correct?

Mr. **Davies**. This entire procedure was worked out very carefully with EPA. EPA could be placed in a position of having to review many hypothetical proposals and being forced to reject many of them under one scheme. Under the process we have agreed to with the EPA, the EPA would not be forced in that position of having to review hypothetical projects.

Mr. **Stockman**. One company had to spend $500,000 to prove they could not burn coal in Los Angeles. Do you think that is a very rational way to conduct a program?

Mr. **Davies**. The requirement of this law is that oil and gas not be used if alternate fuels are available. That was our very first case. We all had a lot of growing pains, both the company and ourselves. I would hope in the future that amount of work would not be necessary.

Mr. **Stockman**. What I am trying to get at here is does there not have to be some rule of reason? Best available control technology even under the Clean Air Act is a very difficult thing to define and in a sense it is ultimately arbitrary, depending on what judgments people make who have the authority to issue those decisions. It seems to me that your program is not going to work effectively or we should not even be doing it if there are no standards other than case-by-case judgments that can lead to results like the first one you mentioned. Why do you have such confidence that things will improve?

Ms. **Rollins**. Mr. Stockman, if somebody did a half million dollar study, all that proves is that they have a very high class consultant. The Department, of course, is not anxious to have people expend great sums of money to make such prophecies. We are beginning now to work on a number of techniques that might provide for a study of what technologies might work and an economic and environmental test by regions and by locations. Applicants would not have to come in and prove to us one technology is too expensive or that one technology will work.

This program is in its infancy and I realize from the time I watched it from the outside that there are a number of things we can do here to relieve the burdens. We are going to work on them this year.

Mr. **Stockman**. Thank you.

Mr. **Sharp** [presiding]. The time of the gentleman has expired.

Mr. **Moffett**. May I ask 1 minute of questions?

Mr. **Sharp**. Yes.

Mr. **Moffett**. I just want to get back to this issue of ERA intervention in nuclear cases, if I can, Miss Rollins, just to make sure that we are absolutely certain of your testimony.

During the time that you were Deputy, there were suggestions made by ERA that DOE intervene in certain proceedings relating to nuclear. One was Seabrook, as you may recall, where a suggestion was made to intervene with regard to construction work in progress. Another was the issue of whether not there should be an intervention in the Illinois Commonwealth Edison Co. case with regard to construction of four nuclear units.

Ms. ROLLINS. I understand.

Mr. MOFFETT. In order to be absolutely accurate, are you suggesting not only that you don't foresee testimony but also that you don't foresee requests stemming from ERA to testify on behalf of nuclear power?

Ms. ROLLINS. We are both using langunge that was too broad in both the proposal that the ERA intervened on, the Seabrook matter, and one other recommendation, the proposal in the Illinois case. The focus of that testimony was to have been on the oil displacement issue alone. So I don't want to leave you with the impression that there won't be times when staff is raising a recommendation that we involve ourselves in the case.

If you are asking me are we going to be active advocates of nuclear under the standards of the act, I rely on the General Counsel to guide me on when we can and when we cannot enter into interventions under the standards that have been set forth in other States in the legislation. The ERA does not have the staff to be running around the country advocating nuclear power, and I think we will both agree you will not see that happening.

Mr. MOFFETT. If you go around the country and intervene on behalf of the rate reform, you are certainly not going to have major problems from the majority of members of the subcommittee as I recall their positon on that issue.

Perhaps the way to address this issue is to have Mr. Coleman's office give us a legal analysis of the interpretation of PURPA with regard to intervention. Oil displacement is the issue that gets you into those nuclear questions obviously. As I said, it certainly was not my intent as one of the people intimately involved in putting PURPA together that it result in DOE advocacy before State rate commissions on behalf of nuclear plants. I don't expect a legal analysis at this moment but I would hope that we could obtain one shortly.

Mr. COLEMAN. We would be happy to provide something like that. As a general matter, while PURPA sets forth the specific program and some specific objectives to which an intervention might be directed, that is not the extent of the Department's power or authority to intervene in a particular proceeding either at the State or the Federal level. We intervene in proceedings before the Federal Energy Regulatory Commission, and in a number of cases at the ICC where we are concerned about the effect of coal rates on consumers. The oil displacement issue is also an important one. It may be that in an intervention there will be PURPA issues, but there might be something else in the case in which we would be interested. We don't limit ourselves to PURPA issues if there is an appropriate case to make another point.

Mr. MOFFETT. Perhaps I am focusing too much on that one point but the memos we received from your Department and from ERA with regard to the *Seabrook* case and the February 1979 memo with regard to the *Illinois* case cite PURPA as the basis, the main statute under which you would intervene.

Mr. COLEMAN. I don't believe we limited ourselves to PURPA but we will be happy to get back to you.

Mr. Moffett. It does not have to be a large undertaking, but just an idea of your justification for intervention.

Mr. Coleman. Yes.

Mr. Moffett. This goes back to our discussion yesterday. The budget in brief says, "ERA seeks to guide rather than regulate the petroleum industry." To guide rather than regulate. You in your statement took that line but put a little preface on it saying where possible ERA seeks to guide rather than regulate. It puts a little different slant on it. If your main mission is to guide rather than regulate, we should know that. You are much too expensive to be a guide, it seems to me. You know, I don't think the industry needs guidance with $3 billion a year so that is something to think about.

Thank you, Mr. Chairman.

Mr. Sharp. We were writing in many opportunities for exemption and we might have a lawyer's field day and we might not have very many plants that would switch or make sure they went to something besides oil. Can you give us a little better picture as to where we are in terms of actual conversions that are occurring and where we are in terms of the number that get exemptions. Many of them are in process. How many are going to get exemptions?

Do you get what I am driving at? It is the same basic question Mr. Stockman asked. All of us agree it is a valuable goal, but are we going to do anything? This is not to blame your Department; I think the legislation starts the problems.

Ms. Rollins. I understand. The Assistant Administrator again has just finished, if you will, a summary report on this program and I would like him to respond to that question.

Mr. Davies. One deals with new facilities and one deals with existing facilities. In addition, we have negotiated voluntary conversions.

Mr. Sharp. Are any of those final?

Mr. Davies. These are all proposed.

Mr. Sharp. Is there any sort of indication how long those can be drawn out. I know cases vary.

Mr. Davies. They vary considerably. In addition to the orders, we have also negotiated the conversion of three additional facilities. The owners and operators prefer to convert them without orders because they felt that they could convert them more quickly without the regulatory process and the three, in fact, are converting.

We have also worked with EPA and the States and the utilities in a NEPA program and last year we had three additional powerplants that actually converted to oil and are now burning coal as a result of these activities.

Before I leave the existing facilities area, I should mention that the regulatory process is probably close to a 2-year process. I think we have to go completely through the procedures under that regulatory scheme. Some of the conversions could occur before we concluded the legislative process, others may be years later.

In the new facilities area, we have granted two exemptions so far. We have approximately 30 in process now but I would like to discuss with you first prepetition conferences. We hold conferences with many potential petitioners. Many of those petitioners we never see again. As a result of discussions with us, they have offered their plans and in some cases we know how they have altered their plans. One firm who was talking with us recently about constructing an oil-fired facility is now going to use coal. Another one has come back to us and petitioned to burn a mixture. He reduced the amount of fuel they would burn as a result of meeting with us.

The mixture change, I think, is very important because of the way the company did it. They hired an engineering firm to evaluate the situation and they concluded that they could burn more coal in some of the existing facilities freeing waste gas to burn in the new facility, thus reducing the amount of more precious fuels they have to burn. I think we will see many firms, because of this law, reevaluating their situation and the economics, concluding that is in their interest to use an alternate fuel.

Mr. **Sharp**. The impression that I get is the prohibition against a new facility unless it gets an exemption, therefore, the burden is on getting an exemption. The impression that you leave with me is that in fact that has the best hope of working rather than the conversion of both facilities. It seems to me by the time you go through the process it is very difficult to——

Mr. **Davies**. I think in the very near term the existing facilities will get us the most oil savings for this country but in the long term I believe the prohibitions in the statute will result in the best long-term savings.

Mr. **Sharp**. I understand that if there were conversions that would be true but the impression I get is the difficulty of your being able to get a requirement to switch on an old facility is very great. Am I wrong about that, that the burden on you to accomplish that is significant, or do you feel like that we will see a fairly rapid pace of conversion?

Mr. **Davies**. I think it is very mixed. There are people who wish to convert and others will resist. I think some may never be forced to convert under the regulatory decision. We have a very mixed spectrum of cases.

Mr. **Coleman**. Mr. Chairman, it might be appropriate at this point to let the record reflect, as I am sure most of you are aware, that the administration is in the final stages of completing a legislative package directed at utility oil backout, which we will be submitting to the Congress very shortly. Now a good part of that will concern conversion of existing facilities. You are quite correct about the time it takes to process those cases under the present law and the difficulty in many instances of obtaining an effective coal conversion order with the number of grounds for exemption that currently exist in the statute. Another aspect of that legislation will, in all probability, be rather substantial grant assistance to help in some coal conversions where a utility might not have the financial capability to make a conversion which would be quite economic under ordinary conditions.

Mr. **Sharp**. Do you anticipate in your proposal there be any regulatory difference? Isn't the proposal a matter of reducing the financial problem or is there any real change in the exemptions involved and available?

Mr. **Coleman**. I will tell you the way the Department of Energy conceives the proposal, although it is subject to interagency comment and OMB review right now. We have in mind both some regulatory changes and funding changes. For example, we might specify that a certain number of plants listed by name would convert. That would eliminate the necessity for the initial findings that are now required in the statute. The same grounds for exemption would exist, but the difficult grounds for exemption usually amount to the ability to finance the project or environmental problems and the grant funding would assist greatly in dealings with both of those. In other words, the ground for an otherwise valid exemption may be preempted by granting funds to assist in meeting the environmental requirement.

Mr. SHARP. Thank you.

Let me ask a little further flung question on dealing with energy, somewhat. Ms. Rollins, if I am correct, you are testifying today, you testified before another subcommittee of the Congress yesterday, and you were here, I believe, last week testifying before the subcommittee. Are you testifying at any other time this week or next week? I am trying to get a little sense of your immediate schedule before the Congress—the Senate or the House.

Ms. ROLLINS. I am not aware of any requirement that I have to testify next week or the week after, thankfully.

Mr. SHARP. Has any estimate been drawn up about the amount of time that the upper echelons of the Department spend before committees of Congress? Is there that kind of an assessment available that you are aware of?

Ms. ROLLINS. For the last month that kind of assessment is available. I am attempting to at least control my schedule by sending people from the outside and staff so last month and for this month, too, we will have a very close look at where all my time was spent and I would be happy to provide you with that.

Mr. SHARP. I am trying to get a better sense of how much of your time we occupy in hearings. I believe oversight and your responsibilities to Congress are very great, but I am a little concerned that after all the demands, we not only make them great in terms of the legislative mandate, but then we tie up your time and make it difficult for you to manage, carry out the things that we do. I am just wondering whether it would be helping or hurting that prospect by adding five more subcommittees to the House of Representatives and I wondered—obviously you people do not want to become embroiled in that dispute and I would urge you strongly never to get involved in it.

I am curious as to what kind of time we are requiring of you, not that that is not certainly well spent—God forbid we accuse any subcommittee of wasting their time—but it is an essential problem, I suspect, of how much time has to go into the preparation of testimony and I would be curious. I won't ask the record to show the count, but could we have a show of hands of those who are here from the Department of Energy at this time?

Ms. ROLLINS. You just lost your audience, 30 school children.

Mr. SHARP. Well, I believe that was a true show of hands. There may be a few in the audience who chose to participate but obviously there are a considerable number here.

Mr. STOCKMAN. Mr. Chairman, I think that gives us some ideas for the markup.

Mr. **Coleman**. About a year ago we looked at that question on a Department-wide basis and I would have to tell you in all candor the answer was astonishing. I mean it is better now than it was about a year or so ago, but as I recall in the case of Dr. Schlesinger it was a figure of something like 80 separate appearances before committees and the year was about two-thirds over at that point. However, the Assistant Secretaries are testifying more this year than last year.

[The following information was received for the record:]

Question. Outline of the commitment of time the ERA Administrator spends on appearing before Congressional committees.

Answer. Since assuming the post of Administrator of ERA in January 1980 I have appeared before the Senate Energy Committee, Subcommittee on Regulation and the House Government Operations Committee, Subcommittee on Environment, Energy and Natural Resources to give testimoney respectively on the Administration's proposed gasoline rationing plan and on the sugject of middle distillate in addition to appearing before this subcommittee. ERA has also testified before the House Science and Technology Committee, Subcommittee on Natural Resources and Environment and the House Interstate and Foreign Commerce Committee, Subcommittee on Oversight and Investigations. We have also spent considerable time briefing congressional staff on various ERA programs. It is expected that during the coming weeks and months the Administrator's will be asked to give testimony on ERA programs before the appropriate Senate Authorization Subcommittee, and both the House and Senate appropriation subcommittee in support of the programs and resources requested for the ERA for fiscal year 1981.

One might say that the time that the Administrator and senior staff spend attending Congressional oversight hearings does impose upon the time that would otherwise be spent on carrying out the emergency management, regulatory and enforcement functions of the department. However, the appearance before the Congress to expand upon ERA's current and proposed programs is a necessary and important adjunct to the President's written programmatic/budgetary documents submitted to the Congress annually.

Mr. **Sharp**. Thank you.

I want to recognize Mr. Loeffler. Let me recognize Mr. Loeffler, from Texas.

Mr. **Loeffler**. I thank the chairman.

I have, in the past, acknowledged having previously worked with Ms. Rollins at the Federal Energy Administration; I have also had the opportunity of working with Mr. Goldstein as well. It is a delight to see you at the witness table, too, and I will have a question for you momentarily. To many of you who raised your hands, welcome. Some of you I have also worked with in the past.

Ms. Rollins, I would like to ask for a general comment from you because as we are all aware, the EPCA statute pertaining to the present crude oil deregulation program or decontrol program does expire in 1981. What are the current administration plans toward that end?

Ms. **Rollins**. Well, as I reported last week, Mr. Congressman, the ERA has been thinking about this subject for some time as you well know. As regards the administration, I am not in a position to speak. Last week the Secretary, as he testified here, made a commitment to examine that question and in the fullness of time we will present whatever is the administration's position to this body and of course to its companion body on the Senate side.

Mr. **Loeffler**. I would also like to ask a followup to that question. Will you be in consultation with the members of the respective committees before a final determination is made by the administration?

Ms. **Rollins**. Indeed, Mr. Congressman.

Mr. **Loeffler**. We will work together toward that end in a vigorous fashion.

I would like to ask you, Mr. Goldstein, a question which will be prefaced by an actual case that is currently pending before the Office of Hearings and Appeals. In no way do I wish to influence the direction as far as the decision is concerned but I do wish to point out the extreme delay and the fact that a decision should have been reached well before now, a decision which would allow a constituent in the 21st Congressional District the opportunity to be able to move ahead or to disband or at least to plan.

The Rainbow Oil Co. in Texas filed for exemption relief in February of 1979. This is dealing with allocation regulations on gasoline. There was no action in the regional offices in Dallas, Tex., for 2 months. Then the case was referred to your Washington office for disposition. Since that time there has been no final disposition. There are now 12 months which have lapsed on this particular case and this is just one of many, as you and I are both familiar. This is vital time because as far as that business is concerned they have not been able to plan, they have been merely able to drag their feet in an effort to try to hold on, pending a final determination. At this time they are, at least according to the information I have received, being somewhat harassed by continued requests for additional information, additional information which is basically superfluous to the original request.

When I arrived at the subcommittee this morning I reviewed your prepared testimony and saw the phrase "critical cases," cases in which expedited processes are being attempted. I recognize that from time to time you must place priorities on certain matters, but I believe that this is a critical case and that all cases that have been within the Office of Hearings and Appeals that have not had a final disposition over a 12-month period become a critical case.

With that exact circumstance as a background, I wish that you would comment on why cases similar to the one that I have outlined have had such long delay, and if it is possible to move ahead more quickly. I think it is a critical case. In this regard, I would also personally appreciate a report from you as to this particular case itself.

Mr. **Goldstein**. I am not familiar with the particular case.

Mr. **Loeffler**. I can appreciate that.

Mr. **Goldstein**. As to the general question as to why it has taken a long time for a number of cases to be resolved, I would point to the statistics that accompany my testimony. Those statistics indicate that we have received more than 21,000 cases during the 1979 calendar year.

Mr. **Loeffler**. That is part of the inadequacies of the allocation regulations.

Mr. **Goldstein**. I am not commenting on policies one way or the other, I am just trying to answer your basically factual question as to why it has taken a long time to resolve a number of cases. The staff and the budget which was provided to us during the very period of time in which the *Rainbow Oil* case was filed contemplated case receipts that would be one-tenth of the case receipts that we actually got. Nevertheless despite those problems we have been able to issue over 15,000 determinations during that same calendar year. If you compare that number of determinations with the staff available to us, in particular the professional staff available to us, I think you will see an extraordinarily high rate of productivity.

Mr. **Loeffler.** What is the general time frame for the 15,000 that have reached final conclusion from the moment of receipt of the application until final disposition?

Mr. **Goldstein.** I don't know but I can see whether we can generate that data for you.

Mr. **Loeffler.** I think that would be good for the subcommittee and without objection I would ask unanimous consent that that information be inserted in the record at this point.

Mr. **Sharp.** Without objection, so ordered.

[The following response was received for the record:]

The average time taken to process the determinations issued by the Office of Hearings and Appeals during the 1979 calendar year was 88 days.

Mr. **Loeffler.** Again, I would appreciate it if you would inform me directly as to the status of the particular case that I cited for you.

Mr. Chairman, I have no further questions at this time and I yield back my time.

Mr. **Sharp.** Miss Rollins, you have been mulling on the question I asked you about the numbers of people that are here today from the Department and I guess I have to state I am really almost shocked at the number that are here. I had looked out there and thought I saw at least the first row and one or two other people and I find it is almost the entire room. I have to say I am not sure where the total villain is in the problem of misuse of time.

I guess I am not convinced our questions are so compelling and our lectures so brilliant that everyone in the Department needs to spend their time here on these issues. Mind you, I don't want you not be here but I wonder if that really is a wise use of everybody's time. I will allow you to comment. I am not sure they are all from your agency alone.

Ms. **Rollins.** Just about that half of the room is not, however they are all from the DOE. I would like to point out the difference between this crowd and the small select group of people who were at yesterday's hearing which had a lot more drama. I think we have the people here who have worked on the budget. Each time I misstate they grit their teeth and wish I knew better figures and were all a little more persuasive to talk about what they are doing and they believe as do I that the success or failure of their program not only depends upon each of us but the resources we get. They have something invested in these programs.

Mr. **Collins.** Would the gentleman yield?

Mr. **Sharp.** I will in a second.

I have to say I am not sure I would totally agree with that except for the fact that I do assume that a lot of people put in a lot of extra time and knowledge and effort and do a lot greater commitment to public service than any credit that they get. We have a great tendency up here to help the demoralization process in the Federal Government so I don't wish to be too critical and to recognize the fact that a lot of people do in fact work terribly hard to make a contribution in the most extraordinarily difficult circumstances. With lack of resources and nobody recognizing any work that actually gets done. I think we are all going to have to be a little more careful about the utilization of the resources or there won't be many of us to kick around.

The gentleman from Texas, Mr. Collins. It is your turn and I have no further questions, but you will have adequate time.

Mr. COLLINS. I just would like to say that I commend you and I am most appreciative that so many members of the Department of Energy are sitting in because I cannot think of any 2 hours that would be more beneficial for them than these 2 hours spent learning of the interest the Congress has in this area. You have one of the most sensitive areas in the Government. We hear more from our constituents on this issue than on any other. I cannot think of a better morning the DOE employees could spend. I wish you had brought everybody else with you.

I would like to first, if I could, turn to Dr. Goldstein. I don't know whether you are doctor or mister. Are you a lawyer?

Mr. GOLDSTEIN. Yes; I do hold a J.D., but I have never been called doctor before.

Mr. COLLINS. You certainly have an interesting position working on all of these requests for release. We do hear a lot of them. I realize that you didn't create the problem, and that you are just trying to help solve it, but I wanted to first get a little background on your own personal feelings on this. Do you believe that we can solve the energy problem best through Government regulation or through the open market?

Mr. GOLDSTEIN. Well, Mr. Collins, my position is not one of making policy formulations of that type. It is one of adjudicating cases under the statutes which the Congress passed and the regulations which the Department issued.

Mr. COLLINS. Let me go back to show you that I agree with you. You are trying to do a better job. You hit a peak in September on receipts but the receipts are running about 2,000 cases. Just taking this summary here we started with an inventory of 920 cases and by working hard and diligently we have increased that to 8,678. That is the inventory of cases. We have increased about nine times the number of cases.

It is interesting that in December you received 1,997 yet the final national determinations were 312. It looks like the harder we run, the faster we are sliding down hill.

Mr. GOLDSTEIN. That is not a correct figure, Congressman. If you look at the three columns entitled "Final National Determinations, Proposed National Determinations and Regional Determinations"——

Mr. COLLINS. The proposed and regional. When you get to the total, is that proposed national determination a final determination?

Mr. GOLDSTEIN. It is final unless there is an objection to it and in many cases there is no objection. The issuance of a proposed decision constitutes a major stage of completion in the total processing of the case.

Mr. COLLINS. Is a regional determination a final determination?

Mr. GOLDSTEIN. It can be.

Mr. Collins. Why can't we just make that final then? You are trying to get these finished. Let's do away with all this referral business.

Mr. Goldstein. The reason we make it a proposed determination is to give the applicant, which is generally a small businessman, a chance to tell us in the event that his application is proposed to be denied why it should not be denied. It affords the small businessman a further opportunity to tell us why the relief which he requested should be granted. It operates to his benefit. If he does not respond to it, it is then automatically made final.

Mr. Collins. After how long?

Mr. Goldstein. I don't know but I could find that out for you.

Mr. Collins. How many are actually completed? You have an inventory here of 8,678 cases and you have gone from 920. How many of those cases are actually completed of that 8,678?

Mr. Goldstein. Well, if you start with the regions, you look at 233 final decisions, that is on the third table. In other words, what you are asking me to do is to subtract from the total determination figure the proposed determinations. By the way, Congressman, a proposed decision that grants relief is generally made effective immediately. So as far as the applicant is concerned that is effective relief at the time the proposed decision is issued. But if you nevertheless subtract from that all of those proposed decisions, which I would suggest is not really appropriate in reaching a determination as to how many applicants are actually afforded relief, and you add together the figures, you get in December 233 final decisions in the regions, 843 administrative closings. If you go back to the national figures, you get 175 decisions and 142 administrative closings and the total of that figure will be the total that you asked me for. But I would suggest to you that the resulting figure is not an appropriate calculation to make if you want to view the nature of the actions taken by the office during the month of December.

Mr. Collins. Well, what do you think it will be 6 months from now? How many do you think you will have as an ending inventory because all of these will begin to test themselves out? Do you anticipate that we are going to level off at 2,000 cases or are you going to see it through?

Mr. Goldstein. I have been told that our most recent inventory figures are about 7,500 cases which is somewhat less than the 8,678 reported for the end of December. What I would hope we would see is a gradual decline in the inventory figures.

Mr. Collins. Have you noticed any unusual per capita input from certain areas? For instance, New England happens to be the area that is the strongest advocate of Government regulation. I wondered if also they might not be the highest area for complaints. Does it settle in any area?

Mr. Goldstein. I don't think that the statistics would indicate that that was the case.

Mr. Collins. You have not found any correlation between——

Mr. Goldstein. Between complaints and petitions?

Mr. Collins. That is right.

Mr. Goldstein. Not in the sense we are using it.

Mr. Collins. In other words, they are coming in just about the same from all over the country?

Mr. Goldstein. That is my general impression. If you would like me to, I can go back into the data and perhaps provide you with a more detailed answer.

Mr. Collins. It would not be hard to take this present inventory, do you have that coded in on computers?

Mr. Goldstein. Yes.

Mr. Collins. The reason I said that is that we get more suggestions from New England than any other part of the country.

Mr. Goldstein. The calculation that you are asking me to make is divide the number of petitions filed by particular regions by the population of those regions.

Mr. Collins. That is right.

Mr. Goldstein. We can do that.

Mr. Collins. I know what the population of New England is. Could we just see a breakdown of States?

Mr. Goldstein. I will do that. It will require a significant computer run.

Mr. Collins. Won't a computer run just show it by States?

Mr. Goldstein. I will be glad to do it for you.

Mr. Collins. Don't you have it in the computer by States?

Mr. Goldstein. Yes.

Mr. Collins. I don't want new data, I just want to see who is having the biggest problem, by States.

Mr. Goldstein. You want it for the entire 1979 calendar year or by month?

Mr. Collins. Just one figure would be fair. Just take what you have to see who is filing.

You know, we have caused all this problem in Congress. I would like to have that with unanimous consent put in the record—just the total figure on the current inventory of cases.

Mr. Goldstein. By State.

Mr. Collins. Yes.

Mr. Goldstein. I will be glad to provide that.

Mr. Sharp. So long as Texas will be included.

Mr. Goldstein. Texas will be a very large figure, I am sure.

[The following information was received for the record:]

The following is a list by State of origin of the number of open cases in the inventory of the Office of Hearings and Appeals on February 13, 1980. With respect to the number of submissions attributed to the District of Columbia, the Office of Hearings and Appeals data as to the origin of a filing is based upon the address of the person making the submission. As a result, where a petitioner is represented by local counsel the State of origin would generally appear as the District of Columbia even though the actual firm seeking relief may be located elsewhere.

State:	*Number of open cases*
Alabama	104
Alaska	10
Arizona	143
Arkansas	159
California	1,802
Colorado	168
Connecticut	84
Delaware	85
District of Columbia	339
Florida	560

Georgia	192
Guam	1
Hawaii	34
Idaho	46
Illinois	367
Indiana	181
Iowa	141
Kansas	247
Kentucky	220
Louisiana	232
Maine	53
Maryland	269
Massachusetts	196
Michigan	218
Minnesota	120
Mississippi	79
Missouri	287
Montana	31
Nebraska	88
Nevada	34
New Hampshire	44
New Jersey	124
New Mexico	26
New York	270
North Carolina	167
North Dakota	31
Ohio	261
Oklahoma	346
Oregon	103
Pennsylvania	586
Puerto Rico	3
Rhode Island	32
South Carolina	104
South Dakota	27
Tennessee	177
Texas	981
Utah	39
Vermont	19
Virginia	279
Washington	266
West Virginia	80
Wisconsin	145
Wyoming	31

Mr. COLLINS. I imagine we have a large number of them. I would be glad to tell my people at home because we have found that on the immigration cases, we run more cases than any other three States combined. On this issue, we probably have our share also.

We caused the problem in Government regulations. Can you give me specific suggestions regarding a law we could pass to simplify these regulations?

Mr. GOLDSTEIN. Well, you are asking me again the same question you asked me at first.

Mr. COLLINS. That is right.

Mr. GOLDSTEIN. It is really not within the province of my position to make policy determinations of that type so I would just as soon pass that to Mr. Coleman whose job, I would add, it is.

Mr. COLEMAN. That is not right.

Mr. COLLINS. With all the experience that you have with our regulations, Mr. Coleman, would you have some comment?

Mr. COLEMAN. Mr. Collins, I have some sneaking hunch how this data request you have made is going to come out and I would say that it is probably going to show that the greatest number of them come from our home state.

Mr. **Collins**. Is that right?

Mr. **Coleman**. Yes. It happens to be that is where the good Lord put most of the oil and gas, and most of these cases, other than the allocation cases, generally are filed by a producer or somebody in the oil and gas business requesting some exemption relief.

Mr. **Collins**. The large number of these cases are producer cases? Service stations?

Mr. **Coleman**. The largest number is service stations, wholesalers, and jobbers.

Mr. **Collins**. Service stations, wholesalers, jobbers. Does the oil company get involved in this type of case?

Mr. **Goldstein**. It can.

Mr. **Collins**. If the company has a filling station or service station?

Mr. **Goldstein**. He can, yes.

Mr. **Collins**. Any other way, distributing?

Mr. **Goldstein**. I am not sure I understand your question.

Mr. **Collins**. Aside from the jobbers and service stations, who else gets involved in it?

Mr. **Goldstein**. Crude oil producers, refiners, consumers.

Mr. **Collins**. Listen, let me just ask one other thing. Is the purpose of your computer tabulation to tell what kind of people are filing the applications? Do you have them categorized by service station, jobbers, independent oil producers, major oil producers?

Mr. **Goldstein**. We don't have them categorized that finely. We have them categorized by the particular regulatory provision from which they are requesting an exemption and that will roughly give you an idea of the type of operation that they conduct but it may not always be precise. We can give you that data. We have been working to try to generate that data.

Mr. **Collins**. That would give me the figure I would want. That would be very good.

Mr. **Sharp**. Without objection, we will put that in the record.

[The following information was received for the record:]

The majority of the submissions received by the Office of Hearings and Appeals during the 1979 calendar year relate to the regulatory provisions governing the allocation of motor gasoline. The balance of the requests received are generally distributed as follows:

Buy/sell program—Part 211.65	44
Old oil entitlements program—Part 211.67	131
Testing requirements—Part 430	29
Emergency building temperature regulations—Part 490	1,298
Data submission requirements	109
Crude oil pricing	276
Freedom of information appeals	153
Remedial orders and related requests	447

Mr. **Sharp**. It might help us to identify which of the regulatory provisions are generating the most cases because you list them by regulatory action.

Mr. **Goldstein**. I can tell you that right now, Mr. Chairman.

Mr. **Sharp**. What it is?

Mr. **Goldstein**. I can tell you that it is the service station and the reseller cases that are generating the most applications. If you look at the regional case receipt figure, you will see a large number and almost every one of those cases is a service station or a reseller.

Mr. **Sharp**. Is it primarily allocation or are there prices?

Mr. **Goldstein**. Primarily allocation.

Mr. **Sharp**. Base period adjustment?

Mr. **Goldstein**. Yes.

Mr. **Sharp**. That is the largest sector but then I assume there will be a number of others that we would identify. What I am saying is that clearly I can understand that is the biggest particular item but are there a number of other tickets we might well want to look at?

Mr. **Goldstein**. Crude oil producers. We have a number of refiner cases which involve far more complex issues than the reseller and retailer cases. We also have exception applications filed by consuming firms as well but by far the bulk of the total case inventory will be retailers and resellers. If you look at the December opening inventory for the regional centers you will see a figure of 4,509 out of a total of 8,678. Almost all of those regional cases are retailers and resellers. A certain portion of the headquarters cases are also retailers and resellers so you can see that a large portion of the total case inventory comes from that segment of the industry.

Mr. **Sharp**. I guess what you are saying is that you will make that a part of the record, you will expand on the tables that are part of your testimony, that will be in the record anyway, a table that will list by State the numbers for Mr. Collins and also that would give us a breakdown as well on the nature.

Mr. **Goldstein**. And categories. We will do the best we can.

Mr. **Collins**. Just on your present information, don't program in anything else.

Mr. **Goldstein**. You always have to punch something in to get anything out. It won't be a major effort.

Mr. **Sharp**. You don't want him to do a survey.

Mr. **Goldstein**. No one will let a contract.

Mr. **Collins**. How can we improve these laws on regulations, Mr. Coleman?

Mr. **Coleman**. Mr. Collins, it is the view of the Department of Energy, as expressed in two or three major Presidential messages, that in terms of petroleum policy, we should move to decontrol. All of the actions necessary to phase out price controls have been taken by the first of this past year with respect to gasoline. If you are going to have gasoline allocation controls, you are going to have a lot of the kinds of cases that Mr. Goldstein has to deal with.

Last spring, when we had serious gasoline problems, there were a number of changes made to try to make the controls more current, more effective. There is not any way you can make changes like that without having a lot of problems around the edges and a lot of people are going to come in for special relief.

It is the view of the Department of Energy that the President has stated as far back as April of 1977 that we would like to decontrol gasoline. It has been a question of timing. But if you have those controls in place, you are going to have a lot of cases over there for Mr. Goldstein. It is as simple as that.

It is our view that we have made rather remarkable progress moving toward deregulation. Gasoline is the largest single outstanding exception to that statement.

Mr. Collins. Thank you, Mr. Chairman.

Mr. Sharp. The gentleman from California.

Mr. Moorhead. First, I want to go back to one of the points that Mr. Collins has been covering and that is so many of the gasoline station operators and individuals that have to come to the Federal Government feel overawed by having to deal with the U.S. Government to begin with and they are not making so much money that they can afford to go out and hire expensive attorneys so I think it is important for us to emphasize the need to help those people that need to file for relief when there are so many of them, 7,500 of them indicate there is an awful lot of volume. Some way or other we need to obviate the necessity for as many of them having to come in and file as we can.

I think that simplifying our regulations and dealing with these problems in a better manner than we have in the past would do an awfully lot. So I would hope that we would even go further than what Mr. Collins has spoken of. I know it would save the Department of Energy millions and millions of dollars to be able to handle as many of those things as they can.

There is one area in addition to that that I am interested in being from southern California where our conversion programs of course are not as workable as they are elsewhere. I wanted to ask you while you were here about applications for exemptions for people in southern California and how much expense and effort that they were having to go into in order to get the exemptions from using coal which they cannot obviously use. What have you done along that line?

Ms. Rollins. Congressman Moorhead, I am only aware of one case that the Department has just decided involving the State of California. What I would like to do for the record is make a run of our files and provide you a name of any applicant that has filed for exemption and any further information I have to the case process and where they are and what their status is in that filing.

[The following information was received for the record:]

Q. List applicants who have filed for exemption under the provisions of the Fuel Use Act from the Southern California area. Provide their status and the cost to the applicant companies.

A. The following Southern California companies have submitted petitions to DOE:

1. Special Temporary Public Interest Exemption Petitions

Petitioner	Number of Units	Status	Cost
Imperial Irrigation District	6	All pending.	No charge
Los Angeles Dept. of Water and Power	21	All pending.	No charge
Applied Energy Inc.	3	All granted.	No charge
Pacific Gas and Electric	18	All pending.	No charge
San Diego Gas and Electric	38	14 pending 24 granted.	No charge
Southern California Edison	49	All granted.	No charge

2. Powerplant Petition

Petitioner	Number of Units	Status
Imperial Irrigation District	1	Pending

3. Major Fuel Burning Installation Petition

Petitioner	Number of Units	Status	Cost
Anheuser-Busch (Los Angeles)	2	Granted	$10,000

Although DOE does not require petitioners to provide information on preparation costs, it is anticipated that, as the DOE processes such petitions and the information becomes public, the costs of preparation to subsequent petitioners in areas of the country for which petitions have been submitted will be reduced because of data availability in the DOE public file.

Mr. Moorhead. I am concerned, because the first petitioner paid $500,000 in legal consulting and internal resource cost to prove that you cannot burn coal in southern California. The Government has told us that long ago. You know that is outrageous when you have to spend that kind of money, all of which is passed on to the ratepayers, the taxpayers of the community, and I am sure there is an additional expense that we are also paying for the Department of Energy. I would hope that once we have decided that you cannot burn coal in southern California—that was taken for granted once—that there would not be any difficulty for the ones that follow.

Ms. Rollins. Congressman Moorhead, the case you have reference to involves a very large and nationally known brewery. Earlier on the figure was given to me——

Mr. Moorhead. If that is the case that is involved, I know which one it was and of course they were trying to expand their services in southern California and create jobs for southern Californians very close to my area. I know they were all ready designed and ready to go before the law was passed, before the regulations ever came out. They had to wait for the regulations for a long period every time. It is something that would bring a substantial tax base to southern California and provide a lot of employment for our people and the delay costs lots and lots of money beyond that amount as it took jobs from our people.

Ms. Rollins. I understand the thrust of your concern. The half million dollar figure that loomed in my mind was something very egregious until I recognized the size of the capability of the company involved.

Mr. Moorhead. Even though it is a large company, a half million dollars for one plant is a substantial additional cost to heap on to the construction costs because you keep people from expanding, and as you do that we find ourselves in more and more trouble economically.

Ms. Rollins. I understand your point. In the long run it is the national policy to move on to some alternative and ultimately when everybody recognizes that we move on to build the kinds of plants that are dictated by the statutes. Then there will be jobs in your district and there will be jobs around the country, sir.

Mr. Moorhead. I don't think it is really a national policy for us to violate environmental standards that have already been set in law.

Ms. Rollins. And there is certainly no intention on the part of the ERA or the Department to have that occur.

Mr. Moorhead. We wish we could use some of the cheaper fuels in California and we would like to use alternatives like hydro, but your Department has approved recently on a temporary basis the charging of southern Californians for Bonneville hydroelectric power an outrageous rate above what the principal users are going to have to pay in the Northwest. This increase is based on OPEC prices. So when we talk about that timing we have to think about that kind of activity that is really contrary to national oil policy. Do you understand what I am saying?

Ms. Rollins. I understand your complaint and concern exactly.

Mr. **Moorhead**. I notice you are getting into the field of compliance and that the money you expect to obtain from that runs up to very, very large figures—far beyond what it is going to cost you to collect it. I see over a billion dollars. I am concerned about what happens to the money when it is collected. Is it going to be put back into the general treasury, is it going to be returned directly to the people who have been overcharged, or are you going to use it for other programs within the Department of Energy?

Ms. **Rollins**. Lots of us here, Mr. Congressman, want to respond to that question. The easier part of the answer is, where there are violations and to the extent we can identify end users who have been overcharged, the Department does seek, through what we hope is a very simple hearing process, to identify those people and see that they are made whole. Where that does not happen ultimately funds will be returned to the Treasury.

The difficulty involves entering into consent agreements on the part of the Department and firms who have simply entered into orders agreeing to recoup those funds that have been earmarked for various purposes. Both the Office of Special Counsel and Enforcement have sought to come up with innovative ways to use those funds when it is obvious and apparent that the injured parties cannot be identified.

Mr. **Moorhead**. I want to thank you for your testimony. If I seem a little bit overanxious in protecting the 7 or 8 percent of our Nation's population that lives in southern California, it is because we have serious problems. We have problems in other areas but we represent such a large portion of the economic wealth and the people of the country that we must be considered when these rules and regulations involved affect us more severely than other parts of the country.

Ms. **Rollins**. Congressman, I am ever mindful that you exist and those members of your district.

Mr. **Moorhead**. Thank you.

Mr. **Sharp**. Maybe there is a need for mentioning Indiana and Michigan and Texas and some of the other jurisdictions that are so vital to this Nation, that we do not want the ERA to overlook those places and we can name them for you ad nauseam if you like.

The gentleman from Michigan has another question or two.

Mr. **Stockman**. I just want to raise this question. When we get into the nitty-gritty details of aberrations and anomalies like 10,000 cases pending of gasoline station operators or jobbers who want to change customers or add new stations or drop old ones or who want to go to the station from full service to ultimately we fall back on the excuse that we have gone to these hearings year after year and that is national policy and some of those things may not seem very rational or reasonable but it is national policy.

It seems to me that it would be occasionally helpful if the Department would come up here and tell us that some of the national policies that we have adopted don't make sense or don't integrate well with another national policy. That is what I see happening and I would be willing to bet in 3 years we are looking at the backlog table from the gasoline operation.

You have the Clean Air Act, the best available control technology. You have as the second policy the Fuel Use Act which is driving every manufacturer that wants to build a new burning facility in a wedge between those two policies. It seems to me we better get some recommendations from the administration and Department of Energy about how those two can be integrated better.

I understand that if you want to build a major fuel burning installation you are going to have to first go through modeling to determine whether or not you can comply with the EPA requirements for new sources and then you might take the result of that modeling before your State air resources board and even though you were rejected somebody at DOE finds that well, you didn't try hard enough or you were not creative enough, you better go back and try again. It seems to me that you are building in such huge lags in terms of any investments, building any plants, modernizing any processes that that may well be one of the reasons that we have negative productivity growth.

Now have you analyzed just what the possibility for blockage and delay is when any major firm in this country wants to build a new plant or expand a plant that has a fuel burning installation that will get caught up between the whole body of new law that we have in the Clean Air Act, Fuel Use Act? I think there is a serious problem and we cannot talk about it in terms of numbers on backlogs and all kinds of new categories you are creating about what stage of compliance people are in. I think there is a serious problem.

Ms. **Rollins**. My response to that is simply that in the abstract I think we all dealt with those problems as the Fuel Use Act was moving through the Congress. The difficulty with the abstract example, of course, is that it is not until you have a real-life case that you begin to understand exactly how much time is required to move a request from process to process. I am not here to say that back in 1977 all of us in this room didn't understand exactly what the standards were with regard to protecting the environment.

The Congress, now in conference, is making decisions on larger projects—how we should balance our needs with your environmental needs. Whatever it is we project to you as a hypothetical always seems to be a little faster than reality. When Lynn Coleman addresses the issue of the new legislation coming forward, I think that will indicate our honest attempt to begin to identify some of the bottlenecks and to address them in ways that we all understand. You know, it is not an easy balance and we all knew we had to balance these concerns when we started this.

Mr. **Coleman**. May I comment on that? I think you are obviously correct, Mr. Stockman. I think this subcommittee made a valuable contribution and a very important first step toward doing something about that in pushing the Energy Mobilization Board legislation through the House. We will also be taking a crack at that in this utility oil backout up the legislation. The President's Commission on Air Quality, as you know, will be reporting next year and the President's Commission on Coal has made a preliminary report and a final one is anticipated promptly.

I think the area of coal is perhaps the one area where our policies have been the least well coordinated in the energy area. There is certainly incipient and actual confrontation between environmental laws, such as the Clean Air Act, and the Fuel Use Act.

There is also the whole area of transportation. We do not have coal slurry pipeline legislation yet. We have not, in my opinion, adequately addressed issues related to the rail transportation of coal at this point.

I believe we have made substantial progress in assessing the problems of mining coal. Some of that is still up in the air. I think a good deal of progress has been made on it in this Congress but a good deal remains to be done.

Mr. STOCKMAN. Well, I would only respond to that by offering an example. Now as I understand it, if you issue or someone applies for an exemption because this is a new installation they have to go through a fuels use matrix where the burden of proof on them is to demonstrate that there is no alternative to oil or gas, including not only coal but a lot of other things—conservation, solar, geothermal, steam. I don't think that was the intent of the Congress.

I didn't agree with the intent of the law but even as the law was passed I don't think that it was the majority view of the members of this subcommittee to put every single firm in this country who wants to build a new plant or boiler anywhere from coast to coast to the bother of checking the 10 different possible ways of producing or saving fuel that are available to the economy but that sounds to me like what we are doing and that is why you are running up these huge costs and delays in terms of getting any investment made. Now I would like to know why you feel you have to put people through the full academic exercise rather than a much simpler less costly product of demonstrating coal is an alternative here and as a generic matter solar is not either.

Mr. COLEMAN. I think the short answer to that is that we are moving toward changes in those regulations. I hope that the process will be made a lot simpler if we pass legislation which we now have under consideration.

Mr. STOCKMAN. Does legislation we passed in 1978 require that fuels use matrix? There was no discussion of it in the subcommittee. People were talking about coal.

Mr. COLEMAN. I understand, but you have to determine whether they really have alternatives available to them. The requirement you mention was directed at that. It may be that more was required than is necessary. It was the judgment at the time that that was a desirable way to proceed. With experience, we may well modify and simplify those requirements.

Mr. SWIFT [presiding]. The Chair recognizes staff, Mr. Schooler.

Mr SCHOOLER. Mr. Bloom, last year at our authorization hearings, Mr. Bardin, speaking in terms of the Office of Special Counsel's budget, stated that by the end of 1979 audits for the 15 major refiners will be completed. That was on the supposition that it would be business as usual, and you and I know that it is rarely business as usual.

Mr. BLOOM. As regards, if you will, a shortage in gasoline, the kind of discussion you have been having with Mr. Goldstein and his backlog and the kind mercifully I have been able to avoid in our backlog is something that we can expect to get. To the extent they are not staffed there to take on that workload you will see that kind of backlog.

Mr. **Schooler.** Are you, in other words, stating that if there are problems comparable to last year, you would have problems much more severe than what we experienced?

Ms. **Rollins.** There are a number of things I am undertaking to do that. For example, our paper processing requirements at the moment to see how we can relieve some of the burden on both the applicant filing in the region with us and of course our staff here. As a manager, some closer look will be taken at how to approach the problem in another way. But I would expect that, if we had severe shortages, yes, we could see exactly what we saw last year.

Mr. **Schooler.** In fiscal year 1981 we will be facing in a sense a dual enforcement issue. We will have price controls and we will also have a windfall profits tax, assuming legislation is passed.

It would appear that enforcement of both of those activities would be comparable in the area of crude oil pricing. Are any plans being drawn up to coordinate the enforcement efforts of the Department of Energy with efforts by the Department of the Treasury to enforce the windfall profits tax?

Also, looking beyond 1981 when decontrol takes effect, the windfall profits tax will be remaining. Has anybody given thought to whether DOE auditors will go back to where they once came from; namely, the IRS?

Ms. **Rollins.** My assistant administrator for enforcement spends lots of time wondering what will happen to DOE auditors. He has also informed me that he has spent some time beginning to open up these issues with the team at the IRS. As we move further into the winter, we will step up those conversations and begin to provide them the kind of assistance they need.

With regard to what happens in the contemplation for how you place the enforcement staff, I quite frankly have not visited that since last year but I will be revisiting it. I can report something the next time I report before this subcommittee.

Mr. **Schooler.** Mr. Bloom, with regard to your global consent orders, the testimony to this subcommittee states three major problems in requiring payments to the U.S. Treasury. Are these three issues ones which could be handled legislatively and, if so, would there be other problems also related to the payment of funds to the Treasury to resolve the $10 billion in overcharge allegations?

Mr. **Bloom.** Could I qualify the premises in your question first? I have not alleged $10 billion in overcharges, but in aggregate pricing violations. The presently unknown number of dollar value of overcharges would be something probably significantly less than that.

In addition to the reasons set forth in Ms. Rollins' testimony in answer to a question posed by the subcommittee as to why there are policy problems in place today on payments to the Treasury, there are one or two other factors that are not emphasized that perhaps I should speak to here. The simple answer is yes, those obstacles as to the authority of the Department which problems are, if anything, understated but the answer to the question posed could be directly addressed and resolved by appropriate legislative action by the Congress.

Presently that is not only a concern of such people as the API and major refiners in my jurisdiction and people who have publicly challenged payment to the treasury, but that matter is being hotly contested in Federal courts. So, if anything, we have understated the mootness of that point but there is one further point. We have to divide the question of remedies, restitution for consumers at different levels of customers and consumers in my area into two parts. One is the moneys that are obtained through voluntary consent orders and second is money that must be ordered disposed by courts upon the adjudication of liability against companies. We have not by any means reached the second stage yet.

Obviously, the Congress can dispose what a court does with those moneys. The Congress could declare, if you wish, that when certain circumstances are met, when certain sums cannot be economically identified with particular individual companies or categories of customers or consumers, that those sums should be directed to the Treasury.

Obviously that is a controversial idea in some dimensions but it could easily be done. The Congress could likewise control the discretion that the Department of Energy exercises. What the Congress cannot at present control is the discretion of the companies who elect voluntarily in the process of rather hard fought, arms-length negotiation to enter into the global consent orders that your question addresses.

In those circumstances for a variety of reasons, including the IRS considerations and legal authority points made in the answer to your question, the companies have deep and abiding problems about the efficacy from their point of view of payments to the Treasury. There have been a few exemptions where fines and penalties are agreed upon under court orders and moneys have been paid.

Just about 10 days ago I received two cashier's checks in the mail, one for $9 million and one for $1 million for fines and penalties which went directly to the Treasury. Where refiners have something to say, however, about what happens to the money, they have only in a very few instances been willing to contemplate simple direct payments of large sums to the Treasury. This is on the advice of their counsel and for many other good and sufficient reasons.

The options to me in the present situation are either to draft a consent order that provides other innovative alternatives for restitution to consumers or simply to do without consent orders. I have deemed it appropriate on the facts as I have understood them to enter into consent orders with alternative methods of restitution that have only occasional involvement. The Kerr-McGee consent order, the first one you will remember, Mr. Schooler, did provide the residuum in the $46 million cash refund would go to the Treasury provided only that an appropriate IRS ruling would establish its deductability.

Mr. SCHOOLER. Mr. Goldstein, probably enough has been spoken on the backlog of cases at your office. However, a variety of people have suggested that perhaps what is needed is not a long-term commitment of resources assuming, for example, that applications start declining once again, but rather a short infusion of manpower to process the backlog. Have you considered looking elsewhere in the Department for the temporary assignment of personnel to assist in reducing this backlog and are there people who would be available to do that kind of work? Is it a highly technical job or something in which, for example, auditors out in the field might be able to assist on a short-term basis?

Mr. GOLDSTEIN. There are two types of considerations that enter into the answer to your question. The first consideration is the ongoing case flow, and if you look at the ongoing case flow of the office during the last 6 months, you will see that it has been rather steady. It has been averaging almost 2,000 cases each month. That kind of a steady and constant flow of cases requires a certain manpower level.

Mr. SCHOOLER. You seem to be able to handle those cases at this stage as far as you are finishing more cases.

Mr. GOLDSTEIN. I think that is right. I think we have been able during the last few months to achieve a situation in which our total determinations are exceeding our total in-flow. So that leads me to the second factor which is a question that Mr. Loeffler pointed my attention to and that is the old cases. I guess it would be possible to consider other resources but I don't know where they would come from. I think that we are trying within the structure of the present office staffing pattern to place a certain degree of emphasis on older cases because, unless there are other factors present, the rule should be first in-first out.

Mr. SCHOOLER. With regard to the process statements made concerning constant requests for additional information, do you have available for service station dealers a clear form which is used by retailers for making requests for base period adjustments or other forms of exemption relief?

Mr. GOLDSTEIN. We don't have a form but we do have guidelines which discuss in lay terms and in some detail the type of financial data that is generally necessary in order to attempt to demonstrate serious hardship.

Mr. SCHOOLER. Is it a possibility that the fact that information is often incomplete the first time around and perhaps the second might reflect the need for more specific guidelines, forms which are available for these station dealers?

Mr. GOLDSTEIN. That certainly is a possibility. But the basic situation that we are confronting is one in which the service station dealer is generally, in terms of financial matters and financial importance to the report to the Federal Government, the least sophisticated group of all the groups that we deal with. We therefore, find it necessary and desirable to maintain a constant dialogue in terms of explaining the data that we need. We could adopt an alternative approach and that would be to say we asked you for all of this data—either you didn't understand it or you didn't provide it and your application is denied.

We have decided not to do that. We have decided instead to try to explain and make every accommodation recognizing that this group is the most unsophisticated group in terms of financial reporting. It might be useful to explore your suggestion further and I will certainly discuss that with my staff.

Mr. SCHOOLER. Miss Rollins, a small portion of your budget is entitled "Program Administration." That portion of your program increases from $3 million to $3.5 million. The budget books still aren't particularly clear as to what the increases reflect. Manpower stays the same. Is it perhaps people moving in, or could you give us an idea of what that reflects?

Ms. **Rollins**. A great portion of that represents salary increases simply factored in almost automatically. In addition, about $100,000 of it represents our attempt to expand the Federal energy guidelines. As you know, that guideline now becomes a major repository for the rules and regulations for doing business with the Department. It is our desire over this next year to add a number of elements to the guideline that are not today contained therein.

In addition, there is one other thing that I think is tremendously important. We did in the last fiscal year spend a great deal of time trying to understand and quantify the paper flow in and out of the ERA with regard to each office that has a responsibility for entitling an applicant to any right under the statute and under our regulations. It is my belief that that entitlement has to be expressed to people not in flow charts but in English like the guidelines you just finished discussing with Mr. Goldstein. So I would like to spend a bit of that money having somebody show me exactly how I can in very simple English lay out the requirements for filing. A portion of that money goes for that purpose and I think it is long overdue.

Mr. **Schooler**. Thank you, Mr. Chairman.

Mr. **Sharp**. The Chair recognizes Mr. Finnegan of staff.

Mr. **Finnegan**. Thank you, Mr. Chairman.

Mr. Coleman, last week when you were here with Secretary Duncan we got into a brief discussion on the memorandum of understanding that I believe was entered into in April 1978 between your Department and the Justice Department. In that discussion I had raised the question about a study that had been made within the executive branch about the use of Emergency Petroleum Allocation Act was used to some extent as a model.

Mr. **Coleman**. I think that the OMB staff would be prepared to go even further than that memorandum of understanding and recommend that there be categorical delegations of particular groupings of cases. The memorandum of understanding that we have with respect to petroleum cases essentially operates on a case-by-case basis with the final judgment being made at the Justice Department subject to my having an argument with the head of the division before the Associate Attorney General. We could eliminate a lot of that kind of problem if there were a broader judgment made by the Justice Department as to the category of cases which could be handled by Department of Energy enforcement lawyers. That happens also to be my own view of that situation.

Mr. **Finnegan**. In connection with that memorandum that you have in existence today, after it was entered into I believe you and Mr. Bloom also had a number of problems in its application relative to the handling of cases and you provided last year a considerable amount of correspondence between the Department and the Justice Department. Have those problems fairly well worked themselves out? Is the memorandum working?

Mr. **Coleman**. It works reasonably well. Some of the difficulties we had last year have resolved themselves by our decision to proceed in certain enforcement cases administratively at the Office of Hearings and Appeals rather than in the courts. I would have to say in all candor it might have been better if we could have proceeded in the courts pursuant to a different arrangement that we had with the Justice Department where we may have a difference of view over how to proceed. I think, unfortunately, that we have been kept from proceeding in those cases as efficiently as we might.

Mr. FINNEGAN. Mr. Bloom, do you have any comments to make?

Mr. BLOOM. I think my evaluation of the experience of the two departments from my limited parochial perspective over the last 2 years would be a little less positive than Mr. Coleman's. I have been frankly disappointed by the bureaucratic formality, the conservatism, the old fashioned turf consciousness and other traditional relations of interagency action that have sadly characterized it under the memorandums. Perhaps some of this was inevitable.

The memorandum by its nature is something of an innovation, it is on the frontier of relations between two executive departments in a very sensitive policy area. It involves control of the programs that inevitably generate disputes given the best of goodwill and coordination. Even allowing for the ambiguity of the language that was achieved by design, hoping that it could lead to an evolutionary experience in which two executive departments would hammer out on a pragmatic basis a mutually confident arrangement for disposition of cases, I have to tell you from my point of view, and I am not trying to lay blame, I think we have certainly not had that favorable evolution based on what has remained, in my opinion, very sadly adversary and occasionally hostile relations to a very unfortunate degree. While I think it has been a valuable experiment in professionalism, and I don't want to denigrate our brethren in the Justice Department who support us in many ways. I have to say on balance I don't think it has been a great success.

Mr. FINNEGAN. Both of you gentlemen, the memorandum was supposed to be in existence for a period of time and would also be subject to review. Are you doing anything to get it revised to overcome necessary obstacles and concerns?

Mr. COLEMAN. We have some discussions underway right now. I had a meeting last week with the Associate Attorney General. We discussed the need to see what changes might need to be made in the existing memorandum of understanding and we have an open issue at this point with respect to reaching a memorandum of understanding for cases arising under the Fuel Use Act that we are attempting to work out. We have not been successful at this point in concluding an agreement with the Justice Department on that subject.

I might say, to put the problem rather fundamentally, it relates to the view taken by some in the Justice Department of their own responsibilities under the Attorney General's statute. This act states that the Attorney General controls the supervision and conduct of litigation on behalf of the Government. Provisions in the Department of Energy Act and the Fuel Use Act say in one case and imply in the other, that we should have a memorandum of understanding subject to the supervision of the Attorney General under that statute. You have the institutional point of view, asserted at the Justice Department, that they really can't exercise that responsibility unless they, in one way or the other, have control of the case.

It is our view that this is an unnecessarily strict reading of that statute. Implicitly I think the conclusion of the OMB staff arrives at the same point. But the ambiguity and the possibility that one department can take one view and another department another view is at the heart of this problem. It leads some—and you could even hear this in the Justice Department—to say, well, if the Congress wants you to handle those cases, they will legislate it clearly so we don't have a lingering responsibility for them.

Mr. **Dingell**. If you will yield, this is one of the things that is constantly distressing and that is that the Justice Department can find almost any construction of the statute that will avoid criminal prosecution and I observe that we have had them before this subcommittee and the Department of Justice has taken a rather uncooperative attitude in view toward the prosecutions amounting to many, many millions or even billions of dollars of overcharges. These include cases of the rigging of the market to convert old oil to new oil. That attitude I think is manifested in almost all of their undertakings. It is a form of constant distress to me and one that I think the subcommittee is shortly going to be somewhat distressed about. The Justice Department's reluctance to carry these matters forward.

Mr. **Coleman**. The Attorney General statute I spoke of is the one that relates to the civil side. On the criminal side——

Mr. **Dingell**. They don't even like to go on the civil side, much less the criminal side.

Mr. **Coleman**. We investigate them, and make a formal referral to the Justice Department.

Mr. **Dingell**. And they do relatively little with your investigations or referrals.

Mr. **Coleman**. Well, Mr. Chairman, I guess people have different views on this subject. My own view of the current situation—particularly the fraud unit that has been working on the reseller cases—I am satisfied with the cooperation they have been giving us in those cases. There have been very few with which they have not proceeded.

Now you can talk about it as you would like it to be or the resources you would like to have on it, but I have to say that I am satisfied, at present, with the attitude of the lawyers they have working on those reseller cases. We will disagree every once in a while and Mr. Bloom and I might feel strongly about a case.

Mr. **Dingell**. I respect Mr. Bloom, you, and the other people at the table, but I must confess on this one you and I have very strong differences.

Mr. **Finnegan**. Mr. Bloom, was the Department of Justice responsible for the failure of the special counsel to take cases directly to court? As I understand it, what Mr. Coleman has suggested is that you have taken administrative action because of the obstacles in the Justice Department. Is that pretty much the case?

Mr. **Bloom**. I would not want to exaggerate the number but there certainly have been some actions brought administratively that we originally intended to bring as original enforcement actions. I think it is true to say also that to some extent you have to quantify it case by case but to some extent in each case the negative elements of the relationship between our Department and that of Justice has certainly had some——

Mr. **Finnegan**. When you do that administratively, that also increases the burden administratively for the need for funds and manpower and everything else, isn't that correct?

Mr. **Bloom**. It transfers some of that to Mr. Goldstein's office and personnel rather than to the Federal courts. From the point of view of my office the impact is about the same.

Mr. **Finnegan**. We would like to have you to provide us more details again, or up-to-date details, documents and so forth as to the problems you have had, Mr. Bloom and Mr. Coleman on this matter and particularly whether it ought to be revised and whether those revisions would be incorporated into a new memorandum of understanding at least for the fuel-use cases.

My next to the last question. You did have a meeting of the fuel-use cases. Are you succeeding in convincing Mr. Shenefield and others that a civil memorandum would prove useful in the case of the Fuel Use Act?

Mr. **Coleman**. I have every confidence that Mr. Shenefield will treat reasonably our request for a memorandum of understanding. We have not been able to conclude one with the Natural Land and Natural Resources Division.

Mr. **Dingell**. How close are you on the statute of limitations on this?

Mr. **Coleman**. With the Fuel Use Act cases not at all because the cases will essentially involve to appeals of a company not obtaining an exemption.

Mr. **Dingell**. Fuel use is no problem.

Mr. **Coleman**. No.

Mr. **Dingell**. What about those cases?

Mr. **Coleman**. I don't think there is a problem on those cases.

Mr. **Dingell**. I am not as comfortable on that as you are.

Mr. Bloom?

Mr. **Bloom**. I want to comment later on your earlier statement about criminal cases.

Mr. **Dingell**. I would like to hear your comment.

Mr. **Bloom**. I would give a couple of sort of masked examples of some problems that I have had that in this area that would make me less sanguine than Mr. Coleman. Mr. Coleman quite properly limited himself to DOE and the Justice Department in the criminal area to the reseller cases. I am involved in some of those and I have no strenuous disagreement with regard to those cases. I have, however, referred a number of other cases involving major refiners which are, of their nature, sometimes very, very complex and demanding and have enormous analytical materials sent with them.

I want to point out that sometimes because of the complexity of our regulations, they become very forbidding to U.S. attorneys and their staffs. I want to say that given the best of goodwill in the head of the Justice Department, the bifurcation in the Justice Department of criminal responsibility and the extent to which a functional monopoly of grand jury decisionmaking lies within the U.S. attorneys scattered around the country expertise in knowledge of energy, generally is in Washington that bifurcation which none of us are responsible for has made my work more difficult.

I don't want to get into specific cases. Some have been identified excessively in the newspapers but there have been cases where U.S. attorneys have quite clearly misunderstood the thrust and point and purpose.

Mr. **Dingell**. I would like to have a list of those citations, I am not asking that you do it for the record. I think that is something we ought to look at.

Mr. **Bloom**. Yes.

Mr. **Dingell**. Do you still have that quaint process down there whereby on the criminal matters that your local investigators in Dallas or Houston cannot talk directly to their alter egos in the Department of Justice but that they must send the information back here to Washington to you folks who then will talk to the top level in the Department and then refer the matter back down to the folks in the field in Dallas or Houston for response? That is from the Justice Department?

Mr. **Coleman**. Sometime considerably over 1 year ago we made changes in the way in which the special investigations unit is set up and the way it handles cases. There is a very close relationship between that unit and the Justice Department as the case progresses.

Mr. **Dingell**. Is that the way it works initially when your people are working up a case and they talk to the Department of Justice—they have to come up through the Washington office to DOE and then back down across the Department of Justice, then back down to the Department of Justice folks in the field? Is that still the way it is done?

Mr. **Coleman**. There may be involvement of the national office but it does not take that long. It is more likely in terms of phone calls because the special investigations unit is a very small group of people, very highly coordinated. They are in touch with each other every day.

Mr. **Dingell**. I am inquiring. Mr. Bloom indicates that that is still going on. Is that right, Mr. Bloom?

Mr. **Bloom**. It is my understanding that we are still required to refer the criminal cases to the head of the Justice Department. In terms of the communications between ourselves, as Mr. Coleman says those communications I think have much improved and are much quicker, less bureaucratic than they have been.

Mr. **Dingell**. You still have to go through this spurious process that I have discussed?

Mr. **Coleman**. From the time there is a first suspicion that there may be a willful violation that leads to a criminal case, Justice wants a well-documented referral.

Mr. **Dingell**. That is no longer the case.

Mr. **Coleman**. The people who handle the crude oil resellers happen to be in the Washington office of the Justice Department. That is where the coordinating usually occurs if we are going to have a criminal case. Once there is, let's say, a grand jury operating, there is very close and easy coordination between the people in the field and the U.S. attorney that happens to be handling that grand jury.

I was going to make one qualification that in the area of the crude oil resellers there is considerable coordination prior to referral. In other words, they are kept advised of the progress of cases as our people are working on the formal referral. That is something we have been doing in the last year that probably had not done before.

Mr. **Dingell**. Since our hearing.

Mr. **Coleman**. You are absolutely correct.

Mr. **Dingell**. The Department of Justice found a new——

Mr. **Coleman**. You have had several hearings on this.

Mr. **Dingell**. We had one where we held it joint with the Judiciary Committee and Justice came in for a rather interesting day. I am not sure they join me in that feeling but we thought it rather interesting. I am contemplating another one because I think it will be equally interesting. I don't think the Department of Justice has, and we would much rather fry them than you.

Mr. **Coleman**. Well, you said that, Mr. Chairman. I have to deal with them every day.

Mr. **Finnegan**. Ms. Rollins, on the answer to our chairman's questions on page 14, question No. 5 [see p. 498] you indicated the Department was proposing to delete language prohibiting payment of expenses for parties intervening in regulatory proceedings. In your response you said even though that provision might be deleted in the forthcoming fiscal year 1981 appropriation, you are not including any funds in the budget for this purpose and, second, you have indicated that the Department has drafted regulations concerning these matters of how you would use those monies but apparently have not proposed them in any way, shape, or form. Would it not be useful to get them out in the open so that before you seek deletion of that language you can convince people that this is a good idea to delete that language?

Ms. **Rollins**. Last year when those guidelines were drafted by the Office of Consumer Affairs within the DOE, it was my understanding that they had been discussed rather fully, if not with this subcommittee, then at least with staff. I would be prepared, once again to not only see the Office of Consumer Affairs open them up, but to participate in the discussion of the guidelines. I am not aware that they have changed any since I last saw them which was last spring.

Mr. **Finnegan**. We would like to see a copy.

Ms. **Rollins**. Yes.

Mr. **Finnegan**. In connection with the funds for rationing, in the 1981 authorization we have the problem that the proposal before us is going to be marked up in approximately 2 weeks from yesterday. It only includes $4 million for emergency preparedness of which less than $1 million is for use for rationing. Now you have indicated to us in your response to questions that the Department will come up with new cost estimates both in terms of supplemental for 1980 and fiscal 1980 and I assume funding for 1981. The problem is the authorization bill moves out of the subcommittee in the next 2 weeks and we don't have those cost estimates, we cannot include them in this legislation.

We would like to know when you are going to do this.

Ms. Rollins. Well, I am well aware of the procedural difficulties and we are working on them almost on a day-to-day basis. I will, this afternoon, have a meeting which hopefully will resolve all the issues at my level and I will be sending those figures forward officially as fast as I can.

Mr. Finnegan. That relates to this question of where you gave us a response that you say that because Congress imposed a limitation on the use of contracts that the Department has been able to complete estimation of cost. I point out to you that that same response suggested that you use more detailees. We will pursue this further before the markup and we also want to pursue with you and your staff regarding the Fuel Use Act and funds on EPA requirements because, at least staffwise, we think there is too much money and we question your estimates.

Ms. Rollins. We can arrange before I leave here today to set up something that might be convenient for all of us.

Mr. Swift [presiding]. Thank you, Mr. Finnegan.

Mr. Whitenton.

Mr. Whitenton. You have demonstrated the importance of having capability within the DOE to respond quickly to circumstances, hardships imposed by the regulation. For example, new policies which have been dictated to gasohol, motor gasoline, and crude oil allocation would appear to be broad policy matters that should be resolved by public rule making proceedings with ERA rather than by a case by case. Could you please provide for the record—and this is the kind of question that might be better submitted at a later date—how the ERA has prepared to be as responsive to changes and circumstances and also how the ERA is planning to perfect its reservations in order to reduce the burdens associated with the thousands of application decisions?

Ms. Rollins. Yes; we will be pleased to provide that for the record.

[The following response was received for the record:]

Question. What is ERA doing to speed up the responsiveness of your rulemaking process to meet changing circumstances?

Answer. The speed of the rulemaking process is severely restrained by the requirements of the Administrative Procedures Act, the Department of Energy Act, the National Environmental Protection Act, the President's Regulatory Reform initiatives, the Federal Register procedures and various internal ERA and DOE procedural requirements. Many of these can be waived for good cause in emergency circumstances, and such waivers have been obtained on many occasions during the recent fuel shortages of 1979. We are always, however, severely criticized by regulated parties for the issuance of regulations on short notice and we attempt to provide substantial comment periods and lead times whenever circumstances allow.

The greatest opportunity we have to speed up rulemaking is to prepare standby regulations in advance, thus putting the public on notice as to the form and content of regulatory requirements in the event that circumstances require additional regulation. This, however, is best implemented when we can establish "trigger" points at which the regulations will be put into effect. This is not always practical, but we will continue to seek new opportunities for this practice.

Question. What is ERA doing in order to improve regulations in such a way to ease the burden on small retail firms (e.g., gas stations) which would otherwise have to file thousands of allocation requests?

Answer. During the 1979 gasoline shortages ERA issued a rule providing for an "unusual growth" adjustment, by which retailers could obtain adjustments in their allocation entitlements if their recent growth had exceeded their base period use by a specified amount. Notwithstanding the fact that this amendment was heavily criticized on the (probably groundless) theory that it benefited certain geographic

areas and not others, we believe that it was an important provision in establishing equity among retailers who had recently expanded their business.

There is currently no other rule providing for adjustments in retailers' allocation entitlements, except through the exceptions process, and none is planned. We are, however, examining the possibility of assisting the smallest retail sales outlets by establishing a "floor" under which their allocations would not fall because of a reduction in their supplier's allocation fraction. Other such devices for the smallest firms are also being evaluated, such as perhaps limiting allocations for new stations which directly compete with existing outlets. We plan to take these issues up in a Notice of Proposed Rulemaking for gasoline allocation which we hope to issue reasonably soon.

Mr. WHITENTON. That is all.

Mr. SWIFT. Thank you very much.

Thank all of you for your assistance to the subcommittee. Have a very pleasant lunch.

The subcommittee stands adjourned, subject to the call of the Chair.

[Whereupon, at 12:42 p.m., the subcommittee adjourned, to reconvene at the call of the Chair.]

FISCAL YEAR 1981 AUTHORIZATION FOR THE DEPARTMENT OF ENERGY AND THE FEDERAL ENERGY REGULATORY COMMISSION

WEDNESDAY, FEBRUARY 20, 1980

House of Representatives,
Subcommittee on Energy and Power,
Committee on Interstate and Foreign Commerce,
Washington, D.C.

The subcommittee met, pursuant to notice, at 2:20 p.m., in room 2123, Rayburn House Office Building, Hon. Edward J. Markey, presiding (Hon. John D. Dingell, chairman).

Mr. Markey. The hearing will come to order.

This is a hearing of the Energy and Power Subcommittee on the Department of Energy authorization for fiscal year 1981, on nuclear waste management.

With us today is George Cunningham, who is the Assistant Secretary for Nuclear Energy of the Department of Energy, and Sheldon Meyers, who is the Deputy Assistant Secretary for Nuclear Waste Management of the Department of Energy.

We will begin with a statement from the gentleman from Ohio, Mr. Brown.

Mr. Brown. Thank you, Mr. Chairman.

The area of nuclear waste and spent fuel is a pressing issue and has been for too many years in my opinion. The resolution of this issue may well be the key to resolving the current nuclear stalemate in this country and thus allowing us to progress with nuclear power as one of the resources that can be used as an alternative to foreign oil.

The President's recent policy pronouncement does not adequately address the problem. The President's program will slow the resolution of our waste disposal. We must move somewhat more rapidly than the President seems willing to go.

The dropping of the waste isolation pilot project as an immediate demonstration project is in my opinion unfortunate and delays the solving of our waste disposal problem further.

The President's idea of a State planning council may well slow the process further as we wrestle with the state veto issue.

We must move on with the question of a way for reactor storage for spent fuel or we will find the utilities in this country running out of storage space and we will kill off nuclear power in that rather exclusively discreet way.

I must say to those in the audience who may be in some way antagonistic to the resolution of these problems and opposed to nuclear power in principle that most other countries in the world who are in larger measure dependent on outside sources for foreign oil are moving quite rapidly into the nuclear option.

These include Japan which, of all the countries in the world, has reason to fear nuclear power and ought to be somewhat concerned about it. I have been told directly by colleagues in the Japanese Government that if we are not willing to provide both nuclear power facilities and technologies, they will obtain their answers from the Russians or the Indians or anybody else who will be rational on the subject.

We must, therefore, not think that we are the country in the world that will make the decisions about the use of nuclear power. Those decisions are currently being made outside the borders of the United States.

The question is whether we will make a decision that gives us a nuclear power option. That may be put directly in the context of the choice between war in the Middle East and nuclear power in the Middle West.

I would suggest to the people who are here representing the administration that they might be prepared to defend making those two choices, one or the other.

Mr. MARKEY. Thank you.

Mr. Cunningham?

STATEMENT OF GEORGE W. CUNNINGHAM, ASSISTANT SECRETARY FOR NUCLEAR ENERGY, DEPARTMENT OF ENERGY, ACCOMPANIED BY SHELDON MEYERS, DEPUTY ASSISTANT SECRETARY FOR NUCLEAR WASTE MANAGEMENT

Mr. CUNNINGHAM. Thank you, Mr. Chairman.

Mr. Chairman and members of the subcommittee, I am pleased to appear before you to discuss the Department of Energy's fiscal 1981 budget request for the remedial action program and spent nuclear fuel program.

Before I outline the elements of these programs I would like to review briefly some of the salient points of the President's policy on nuclear waste management which affect our programs.

The key elements of this policy are, first of all, the establishment of a State planning council to provide a framework along with other measures for State involvement in the waste management planning process. The basis of the relationship between States and the Federal Government in the siting of high level waste repositories will be the principle of consultation and concurrence.

DOE will provide financial and technical assistance to State and local governments to facilitate their full participation.

The Department of Energy will locate and characterize a number of candidate sites in a variety of geologic media for mined repositories which are capable of accepting both waste from reprocessing and unreprocessed commercial spent fuel.

After full environmental review under NEPA one or more will be selected from a set of four to five sites as a licensed full-scale repository.

Consistent with this the President is recommending that the waste isolation pilot plant project be canceled. The site near Carlsbad, N. Mex., will be considered along with others for possible use as a licensed repository for both defense waste and commercial high level wastes.

Interim storage of defense high-level waste will continue to be closely controlled by the Federal Government while plans for ultimate disposal in a permanent repository are developed.

The safe interim storage of commercial spent fuel from nuclear power reactors will remain the responsibility of the utilities operating these plants until a permanent geologic repository capability exists.

The administration will continue to press for legislation to build or acquire limited spent fuel storage capacity at one or more away from reactor facilities for those utilities unable to expand their storage capabilities and for limited amounts of foreign spent fuel when the objectives of the U.S. nonproliferation policy would be furthered.

The Department of Energy will work closely with States, other Government agencies, industry, other organizations, and the public to establish regional disposal sites for commercial low-level waste.

Regulatory reforms in several areas are called for. The Nuclear Regulatory Commission, the Environmental Protection Agency, and the Department of Transportation are directed to take specific actions that will improve both the efficiency of their regulatory activities and their relationships with other Federal agencies and State and local governments.

Finally, the policy statement calls for the preparation of a national plan for nuclear waste management, a draft of which will be published for congressional and public review later this year.

Mr. Chairman, I will now direct my comments to the discussion of the subject programs for this hearing. First, the remedial action program.

The remedial action program which is a newly assigned activity in the commercial nuclear waste program involves the integration of four programs previously conducted under the Assistant Secretary for Environment.

The budget request for this program for fiscal 1981 is $54 million in budget authority compared to $35 million in fiscal year 1980. It should be noted that this budget also includes $5 million for initiation of a proposed research and development demonstration of solidification of West Valley wastes.

Remedial actions include decontaminating formerly utilized sites of the Manhattan Engineering District and the Atomic Energy Commission; implementing of remedial actions at the 25 designated mill tailings locations that were authorized by Congress under the Uranium Mill Tailings Radiation Control Act of 1978; continuing remedial actions to remove tailings from about 800 residences, businesses and public buildings at Grand Junction, Colo., and decontamination and decommissioning programs for Department of Energy owned surplus research, test and development facilities that were part of the nuclear development programs of the Department and its predecessor agencies.

The first of these four programs, the formerly utilized sites remedial action program, the FUSRAP, consists of projects for remedial action at former Atomic Energy Commission/Manhattan Engineering District owned or contractor sites and adjacent contaminated properties that have been determined by the Assistant Secretary for Environment as requiring remedial action to eliminate radiological contamination that may restrict the use of that site.

To date surveys have identified about 30 sites that will potentially require remedial action. About 17 sites have been documented sufficiently to identify them as remedial action projects. No legal authority exists for the Department to undertake some of these projects. At other sites authority needs clarification.

We are therefore preparing to introduce legislation to the Congress in this session to authorize the required remedial action at such sites and to authorize the acquisition of disposal sites in consultation with affected States.

It is anticipated that the uranium mill tailings program will increase in activity in fiscal year 1981. This assumes that the Environmental Protection Agency criteria for this program which must be issued before we can prepare firm specifications or obtain reliable estimates or prepare NEPA documentation or perform any remedial action will be promulgated by the end of fiscal year 1980.

Our activities in fiscal 1980 and 1981 will concentrate on high priority sites most impacting the public exposure.

The program at Grand Junction is proceeding and completion is projected for fiscal year 1985. We now estimate the total number of sites to be about 800 and final costs to be approximately $23 million.

Additional Federal authorization of $7.5 million will be required to cover the completion of this program. This authorization is being requested under a separate title of the proposed FUSRAP legislation.

The program to manage and dispose of surplus Department of Energy facilities now includes the reactor, laboratory, test and processing facilities that were determined to be surplus by the AEC in October 1976 as well as facilities that have subsequently been determined to be surplus to current needs.

The program covers the surveillance and maintenance of surplus facilities pending their disposition as well as the planning and implementing of projects to progressively eliminate the inventory of facilities and sites that must be managed.

This program will also provide definitive technology and data on costs and radiological exposure which will be of use to the commercial nuclear industry.

The second program I will discuss is the spent nuclear fuel program. The budget request for this program in fiscal year 1981 is $21 million in budget authority compared to $19 million in fiscal 1980.

The distribution of these program elements breaks down into $16 million for domestic spent fuel storage; $4 million for international spent fuel storage and $1 million for other.

The DOE spent nuclear fuel program supports the administration's policy objective of insuring that spent fuel is stored at reactor sites to the greatest extent possible.

As outlined in the President's recent waste management policy statement, the administration believes that a limited amount of Government away from reactor AFR storage should be provided for those utilities that are unable to find other storage. However commercial utilities will continue to bear the primary responsibility for storage of spent fuel. In addition the spent fuel program supports U.S. nonproliferation objectives.

As you know the Department and the administration have submitted a legislative proposal which would authorize the Secretary to accept and take title to commercial spent fuel and to acquire facilities for the storage of that spent fuel in AFR storage facilities.

Department of Energy is preparing for release in April an updated report on storage requirements and potential storage sites. These data reconfirm the immediate need for AFR storage for U.S. fuel. Six reactors are currently operating without full core reserve capability.

The Department of Energy firmly believes that full core reserve capability is an important operational flexibility and economic asset.

Storage needs in 1983 and 1984 could be met only through the acquisition of one or more existing storage facilities. If a new facility were constructed it would not be available until after 1985.

No decision regarding the acquisition of existing storage facilities will be made until a site specific environmental impact statement on storage facilities is completed and costs for acquiring facilities are defined. The final generic environmental impact statements on the spent fuel policy will be issued soon.

The proposed fiscal year 1981 budget assumes that either borrowing authority or revenues from spent fuel charges will be available to cover the acquisition and operating expenses of storage facilities.

The funds requested will provide for business activities, licensing, and storage research and development. Prelicensing and conceptual design activities started in fiscal year 1980 will continue in fiscal year 1981 to permit prompt implementation of the program to meet near term storage needs.

The principle that will be applied to financing the cost of nuclear waste management and disposal is that the cost should be paid by the generator of the waste and borne by the beneficiary of the activity generating the waste.

Utilities will pay the cost of storage and disposal of waste from powerplant operations and they will pass these costs on to their customers.

The Government will pay the cost of storage and disposal of waste from defense and Government R. & D. activities and finance it from tax revenues.

The international spent fuel program will support U.S. nonproliferation initiatives. The dissemination and exchange of technical information is beneficial to both the United States and foreign countries.

The fiscal year 1981 budget request includes funds for the conduct of feasibility and design studies related to expanding existing foreign storage facilities and establishing new foreign storage facilities which could serve one nation or a group of nations.

The program would insure that countries have the technical information necessary to store fuel so that premature reprocessing due to storage capacity limitations can be avoided.

A clear near term need exists for some AFR storage. If Congress provides the Department of Energy with the authority, we plan to develop a limited amount of storage capacity. As the program develops additional capacity can be provided if necessary.

This cautious approach represents sound management of the Nation's electrical generating capacity and is at the same time cost effective.

We urge that Congress provide us with the authority and funding to support this vital part of the U.S. nuclear waste management effort.

Mr. Chairman, this concludes my oral testimony. I have also included a written statement for the record. I would be prepared to answer any questions. Thank you.

[Testimony resumes on p. 667.]

[Mr. Cunningham's prepared statement follows:]

STATEMENT OF
DR. GEORGE W. CUNNINGHAM
ASSISTANT SECRETARY
FOR NUCLEAR ENERGY
BEFORE THE
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE
SUBCOMMITTEE ON ENERGY AND POWER

FEBRUARY 20, 1980

DOE REMEDIAL ACTION AND SPENT NUCLEAR FUEL PROGRAMS

Mr. Chairman and Members of the Subcommittee, I am pleased to appear before you to discuss the Department of Energy's FY 1981 budget request for the Remedial Action Program and Spent Nuclear Fuel Program.

Before I outline the elements of these programs, I would like to review briefly the salient points of the President's policy on nuclear waste management, which has just recently been released. As you know, this policy is the culmination of the efforts of the Interagency Review Group on Radioactive Waste Management (IRG). Its primary objective is to isolate existing and future radioactive waste from military and civilian activities from the biosphere so as to pose no significant threat to public health and safety. The responsibility for resolving military and civilian waste management problems shall not be deferred to future generations. The technical program must meet all relevant radiological protection criteria as well as all other applicable regulatory requirements. This effort must proceed regardless of future developments within the nuclear industry -- its future size, and resolution of specific fuel cycle and reactor design issues. The specific steps outlined below are each aimed at accomplishing this overall objective.

The key elements of this policy are:

- The establishment of a State Planning Council will provide for a framework, along with other measures, for State involvement in the waste management planning process. The basis of the relationship between States and the Federal government in the siting of high level waste repositories will be the principle of consultation and concurrence. DOE will provide financial and technical assistance to State and local governments to facilitate their full participation.

- DOE will locate and characterize a number of candidate sites in a variety of geologic media for mixed repositories capable of accepting both waste from reprocessing and unreprocessed commercial spent fuel. After full environmental review under NEPA, one or more will be selected from a set of four to five sites as a licensed full scale repository.

- Consistent with this policy, the President is recommending that the Waste Isolation Pilot Plant (WIPP) project be cancelled. The site will be considered along with others for possible use as a licensed repository for both defense wastes and commercial high level wastes.

- Interim storage of defense waste will continue to be closely controlled by the Federal government while plans for ultimate disposal in a permanent repository are developed. The safe interim storage of commercial spent fuel from nuclear power reactors will continue to be the responsibility of the utilities operating these plants until a permanent geologic repository capability exists. However, the Administration will continue to press for legislation to build or aquire limited spent fuel storage capacity at one or more away-from-reactor (AFR) facilities for those utilities unable to expand their storage capabilities and for limited amounts of foreign spent fuel when the objectives of the U.S. nonproliferation policy would be furthered.

- DOE will work closely with States, other government agencies, industry, other organizations and the public to establish regional disposal sites for commercial low level waste.

- Regulatory reforms in several areas are called for. The Nuclear Regulatory Commission, the Environmental Protection Agency, and the Department of Transportation are directed to take specific actions that will improve both the efficiency of their regulatory activities and their relationships with other Federal agencies and State and local governments.

Finally, the policy statement calls for the preparation of a National Plan for Nuclear Waste Management, a draft of which will be published for Congressional and public review later this year.

Mr. Chairman, I will now direct my comments to the discussion of the subject programs.

Remedial Action Program

The DOE Remedial Action Program, which is a newly assigned activity in the Commercial Nuclear Waste Program, involves the integration of four programs previously conducted under the Assistant Secretary for Environment (ASEV). The budget request for this program for FY 1981 is $54 million in budget authority, compared to $35 million in FY 1980. It should be noted that this includes $5 million for a proposed R&D demonstration of solidification of West Valley wastes. Remedial actions include: decontaminating formerly utilized sites of the Manhattan Engineering District (MED) and AEC; implementing of remedial actions at the 25 designated mill tailings locations that were authorized by Congress under P.L. 95-604, the Uranium Mill Tailings Radiation Control Act of 1978; continuing remedial actions to remove tailings from about 800 residences, businesses and public buildings at Grand Junction, Colorado; and decontamination and decommissioning programs for DOE-owned surplus research, test, and development facilities that were part of the nuclear development programs of the Departmunt and its predecessor agencies. This later element also includes the development and documentation of decontamination and decommissioning technology for transfer to the commercial nuclear industry.

The Formerly Utilized Sites Remedial Action Program (FUSRAP) consists of projects of remedial action at former AEC/MED-owned or contractor sites and adjacent contaminated properties that have been determined by the ASEV as requiring remedial action to eliminate radiological contamination that may restrict the use of the site. To date, surveys have identified about 30 sites that will potentially require remedial action. About 17 sites have been documented sufficiently by the ASEV to identify them as remedial action projects. No legal authority exists for the Department to undertake some of these projects. At other sites, authority needs clarification. We are therefore preparing to introduce legislation to the Congress in this session to authorize the required remedial action at such sites, and to authorize the acquisition of disposal sites in consultation with affected States. As more sites are confirmed with respect to the scope and priority of remedial action, they would be added to the program as part of the annual authorization.

We conducted remedial action in FY 1979 at one site near Jersey City, New Jersey, to allow commercial development to proceed on a portion of a former site of the Kellex Corporation that conducted research for the AEC. In FY 1980 we are beginning a major decontamination effort at a number of private properties in Middlesex, New Jersey. Our efforts will expand in FY 1981 to progressively plan, organize and implement remedial action projects at high priority sites as determined in conjunction with the ASEV and consistent with current authorization. After the sites are decontaminated, the conditions would be independently certified by the ASEV.

It is anticipated that the uranium mill tailings program will increase in activity in FY 1981. This assumes that the EPA criteria for this program, which must be issued before we can prepare firm specifications, obtain reliable estimates, prepare NEPA documentation, or perform any remedial action, will be promulgated by the end of FY 1980. Our activities in FY 1980 and 1981 will concentrate on high priority sites most impacting the public exposure - Salt Lake City, Utah; Durango, Colorado; Canonsburg, Pennsylvania; and Shiprock, New Mexico. During FY 1981 we expect to complete the environmental documentation and the detailed engineering for these sites and to initiate remedial action at one or more of them. Remedial action consists of removing the tailings to an alternative location where they can be stabilized on property owned by the Federal government and away from populous communities. Other sites will be stabilized in place and the property acquired by the Federal government. In FY 1981 we will continue R&D on removal and stabilization technology and preparatory work on the remaining high priority sites.

The program at Grand Junction is proceeding and is now estimated to be completed in FY 1985. The total number of sites is now estimated to be about 800. This figure is regarded as fairly firm as we are approaching the June 1980 cut-off date for eligibility under this program. The estimated final cost of this program is now approximately $23 million. The State of Colorado has conducted the program efficiently and has shared

25 percent of the cost. Additional Federal authorization of $7.5 million will be required to cover the completion of this program in FY 1981. This authorization is being requested under a separate title of the proposed FUSRAP legislation. If the criteria promulgated by EPA for the mill tailings program are more stringent than those in use at Grand Junction, more sites may become eligible under the Uranium Mill Tailings Remedial Actions Program.

The program to manage and dispose of surplus DOE facilities now includes the reactor, laboratory, test and processing facilities that were determined to be surplus by the AEC in October 1976, as well as facilities that have subsequently been determined to be surplus to current needs. The program covers the surveillance and maintenance of surplus facilities pending their disposition as well as the planning and implementing of projects to progressively eliminate the inventory of facilities and sites that must be managed. Included are the former New Brunswick Laboratory at New Brunswick, New Jersey; the former Lake Ontario Ordnance Works site at Niagara Falls, New York; and other laboratory and test facilities. In FY 1981 the program will provide for engineering planning to decommission the Shippingport Atomic Power Plant near Pittsburgh. This project will provide definitive technology and data on costs and radiological exposure which will be of use to the commercial nuclear industry.

Spent Nuclear Fuel Program

The second program I will discuss is the Spent Nuclear Fuel Program. The budget request for this program for FY 1981 is $21 million in budget authority, compared to $19 million in FY 1980.

These funds are distributed among the program elements as follows:

	FY-1980	FY-1981
Spent Nuclear Fuel		
Domestic Spent Fuel Storage	$ 15M	$ 16M
International Spent Fuel Storage	3	4
Other	1	1
Total Spent Nuclear Fuel	$ 19M	$ 21M

The DOE Spent Nuclear Fuel Program supports the Administration's policy objective of ensuring that spent fuel is stored at reactor sites to the greatest extent possible. As outlined in the President's recent waste management policy statement, the Administration believes that a limited amount of government away-from-reactor (AFR) storage should be provided for those utilities that are unable to find other storage; however, commercial utilities will continue to bear the primary responsibility for the storage of spent fuel. In addition, the spent fuel program supports U.S. nonproliferation objectives.

As you know, the Department and the Administration have submitted a legislative proposal which would authorize the Secretary to accept and take title to commercial spent fuel and to acquire facilities for the storage of that spent fuel in AFR storage facilities.

DOE is preparing for release an updated report on storage requirements. This data reconfirms the immediate need for AFR storage for U.S. fuel. Six reactors are currently operating without full core reserve capability. DOE firmly believes that full core reserve capability is an important operational flexibility and economic asset.

Based upon utility plans as of June 1979, the requirement for AFR capacity will increase to between 240 metric tonnes (with transshipment) and 620 metric tonnes (without transshipment) by 1983. These requirements assume NRC approval of utility reracking plans beyond those currently approved. If new reracking approvals are not granted, the AFR requirement for 1983 could increase to 1,140 metric tonnes even with transshipment. If all utilities reracked their basins to the theoretical maximum storage density (which may not be possible due to structural limitations or operating constraints), the AFR requirement in 1983 would still range between 170 metric tonnes (with transshipment) and 380 metric tonnes (without transshipment).

Although DOE believes that transshipment is safe, the regulatory and institutional climate has resulted in delays for the utilities in obtaining approval from NRC. For example, Duke Power has been seeking approval to transship fuel between two of its reactors for almost two years. Although the construction of new pools at all reactors requiring additional storage capacity could eventually reduce this requirement, once these new pools were licensed, built and available, DOE analysis indicates that such individual pools would be inefficient and result in higher cost and greater environmental impact than several AFR's which could meet the needs of all reactors. Also, since a date for the shipment of the spent fuel from the reactor site for either disposal or reprocessing cannot be established at the present time, utilities could not accurately forecast individual reactor storage requirements. Under these circumstances, the utilities' ability to plan for, license and provide a sufficient number of new pools is very doubtful. Therefore, the option of interim storage in Government AFR's is a prudent action and should be provided. With any of these scenarios, the amount of fuel stored in the AFR is a small fraction (less than 5 percent) of the fuel stored at the reactors. We believe that this is appropriate, since utilities should provide storage when it is reasonably possible.

DOE has recently completed a study of reracking, at-reactor (AR) and away-from-reactor (AFR) storage which concluded that reracking by utilities is by far the least expensive ($16/kg unit storage cost) and most preferred approach in increasing storage capacity. If new construction is required, AFR's are less expensive ($130/kg unit storage cost) than new AR basins at one to three 1000 MWe unit sites ($320 to $137/kg unit cost).

Storage needs in 1983 and 1984 could be met only through the acquisition of one or more existing storage facilities. If a new facility were constructed, it would not be available until after 1985. No decision regarding the acquisition of existing storage facilities will be made until a site specific environmental impact statement on storage facilities is completed and costs for acquiring facilities are defined. The final generic environmental impact statements on the spent fuel policy will be issued soon. DOE is currently planning to provide in April the initial report proposed in H.R. 3000 on projected AFR storage requirements and potential storage sites.

The proposed FY 1981 budget assumes that either borrowing authority or revenues from spent fuel charges will be available to cover the acquisition and operating expenses of storage facilities. The funds requested will provide for business activities, licensing and storage research and development. Prelicensing and conceptual design activities started in FY 1980 will continue in FY 1981 to permit prompt implementation of the program to meet near-term storage needs. A business office will establish and collect a charge for storage and disposal services, which will permit full recovery of the government's expenditures.

The principle that will be applied to financing the cost of nuclear waste management and disposal is that the cost should be paid by the generator of the waste and borne by the beneficiary of the activity generating the waste. Utilities will pay the cost of storage and disposal of waste from power plant operations and pass these costs on to their customers. The government will pay the cost of storage and disposal of wastes from defense and government R&D activities and finance it from tax revenues.

During FY 1981, research and development will continue to ensure the safe and efficient operation of storage facilities. Currently, fuel assemblies are stored in water basins both at reactors and away-from-reactors. Fuels of various types will be analyzed to identify their potential for fuel cladding failure. Fuel failure detection and fuel content and criticality monitors will be developed to facilitate operations. The storage of disassembled fuel underwater has the potential for greater storage capacities in the same space. Techniques for disassembling and storing fuel will be developed and demonstrated. Dry storage in caissons or shielded containers will also be further developed and demonstrated at the E-MAD facility at the Nevada Test Site. Analytical data on advanced storage techniques, like dry or disassembled fuel storage, will provide a basis for decisions on the use of these technologies in meeting storage needs between 1985 and 1990. The program will also address transportation problems or shortfalls that could affect the availability of systems to transport spent fuel.

The international spent fuel program will support U.S. nonproliferation initiatives. The dissemination and exchange of technical information is beneficial to both the U.S. and foreign countries. The FY-1981 budget request includes funds for the conduct of feasibility and design studies related to expanding existing foreign storage facilities and establishing new foreign storage facilities which could serve one nation or a group of nations. The program would ensure that countries have the technical information necessary to store fuel so that premature reprocessing due to storage capacity limitations can be avoided.

A clear near term need exists for some AFR storage. If Congress provides DOE with the authority, we plan to provide a limited amount of storage capacity. As the program develops, additional capacity can be provided if necessary. This cautious approach represents sound management of the Nation's electrical generating capacity and is, at the same time, cost effective. We urge that Congress provide us with the authority and funding to permit us to support this vital part of the U.S. nuclear waste management effort.

Mr. MARKEY. Thank you. Mr. Meyers?

Mr. MEYERS. I have nothing to add.

Mr. MARKEY. The Chair recognizes the gentleman from Ohio, Mr. Brown.

Mr. BROWN. Thank you, Mr. Chairman.

Gentlemen, do we now have the technology available to vitrify high level nuclear waste?

Mr. CUNNINGHAM. Yes, sir. We have demonstrated the technology on a small scale. We have not demonstrated it in terms of handling large volumes of waste.

Mr. BROWN. Is there any economic or safety inhibition against the use of the system?

Mr. CUNNINGHAM. No, sir, not to my knowledge. It is primarily an engineering development job from this point on.

Mr. BROWN. Why are we not doing it?

Mr. CUNNINGHAM. One point we did not make in describing in the President's recent policy statement is that the program will be expanded to look at alternative forms of immobilization of waste.

In the work which has occurred in recent years, there have been a number of technical factors which have led to concern on the part of some of the scientific community as to the ultimate long-term stability of the vitrified waste. It still may be perfectly acceptable. It is my personal opinion it is perfectly acceptable. It is a situation where we have not thoroughly evaluated alternative forms of immobilizing the waste and determined whether the vitrified waste is the best way to proceed.

As a part of the change in the program, we are proposing to expand our efforts on alternative forms. These are matrix type materials. They include ceramic type materials and other materials. As a result, we will be in a position to assure ourselves and the public that the form we finally select for immobilizing the waste is indeed not only a suitable form but one when compared to other alternatives is selected on the basis of being a better form for immobilizing the waste.

Mr. BROWN. Are you a married man?

Mr. CUNNINGHAM. Yes, sir.

Mr. **Brown**. So am I. If I had waited for the perfect woman, I never would have gotten married. Maybe I should have said it the other way. If she had waited for the perfect man, I never would have gotten married to her.

My question really is, Are we going to follow a procedure whereby we do not take advantage of the systems which we have available to us because we are waiting for the perfect system to deal with the problem?

I do not follow that logic. It is a very exquisite way of killing off nuclear power in this country as an option.

Mr. **Cunningham**. Vitrified waste, at the present time, is really of more concern to us from the defense waste standpoint than it is from the commercial waste program.

We are not pressed in terms of urgency to make a selection today because we really do not have that much high level waste from the civilian program.

On the other hand I think it is a fair question to ask us as technical people when we make a selection as to what is the basis of making that selection of the final form of waste. It is one thing to say we selected it because we know more about it and it is another thing to say we selected it because we have looked honestly and fully at a number of alternatives and we have selected what we think is the best way to go.

I think that is all we are trying to say here, not that we will wait for the perfect form but we will be in a position to justify our selection on the basis of comparison with other alternatives.

Mr. **Brown**. It seems to me there is a danger, as there is in the marriage situation, of experimenting with too many other forms.

Under the President's proposal, how many high level waste sites will be selected?

Mr. **Cunningham**. We are hoping to quantify something on the order of four or five sites for deep geologic disposal and on the basis of the site evaluation of those four or five sites we will then be in a position to select one or more for actual repositories.

Mr. **Brown**. How long do you think it will take to select those sites to get down to the one or more for the actual repositories?

Mr. **Cunningham**. Under the program which we are proposing, we hope to be able to select a site by the end of 1985.

Mr. **Brown**. Five years?

Mr. **Cunningham**. Yes, sir.

Mr. **Brown**. Will that not pretty well kill off nuclear power in this country? What are you going to do about the utilities that need away from reactor storage facilities right now?

Mr. **Cunningham**. I did not mean to imply that I was discussing the away from reactor storage. I was talking about the deep geologic repositories.

As far as away from reactor storage is concerned, we currently estimate that a government away from reactor facility will be needed in about 1983. We are proposing a program of acquisition and construction which we believe would provide us with additional storage capability in the time period required.

Mr. **Brown**. What is the difference between the consultation and concurrence in this legislation and the issue of the State veto?

Mr. Cunningham. I think what we are trying to say is that in the past we have made a number of mistakes in dealing and working with the States. We would like to try to work with the States to avoid a confrontation of the type where one is forced to consider or make a veto. We favor a process where you work through step by step in an honest attempt to alleviate the problems as they develop.

In order to do this, we recognize the fact that many States do not have the technical capability and the staffs to allow them to proceed in that way. We are proposing as part of the fiscal 1981 program, and we also had funds in fiscal 1980 to help support the States in developing the capability for an independent evaluation and an independent participation with us in reaching logical conclusions on site selection and waste management.

Mr. Brown. In that subtle distinction, is it also not true if you consult with the States and they do not concur, in effect they are exercising a State veto?

Mr. Cunningham. If they did not concur, then I think perhaps what you are saying is correct. On the other hand the process we are trying to describe is one in which they do not attempt to simply exercise what you are calling a veto right but in fact they work with us if there are problems which develop. Each have the opportunity to try to solve that problem before we go onto the next one.

If it turns into a confrontation process where people are not willing to work with us then it obviously is a process which will not work.

Mr. Brown. Do you think the State planning council on radioactive waste management will help achieve some speedy resolution of the nuclear waste problem? Is that what you are relying on, their being positive in terms of willingness to address the problem?

Mr. Cunningham. Yes, sir. We would at least like to give that process an opportunity to be initiated and see how it works. It is my understanding that the first meeting of the council will be next week during the Governors' meeting here in Washington.

I think we will begin very soon to get a feel of how positive and how helpful the State planning council can be.

Mr. Corcoran. Will the gentleman yield, please?

Mr. Brown. Yes.

Mr. Corcoran. In view of the comments about wanting to consult with the States and in view of the well-known fact that one of the targeted away from reactor storage facilities is in Illinois, why is not Illinois represented on the State planning council?

Mr. Cunningham. I cannot answer your question specifically. One point I would like to make is that the State planning council was selected to have a reasonable number of Governors and a reasonable number of State representatives who are not Governors and a reasonable number of other experts involved in order to try to accomplish some of the work.

Even though I cannot answer your question specifically, I can say that it is not the proposed function or purpose of the State planning council to interfere or get in between the Department's direct dealings with the States which are concerned.

I can assure you that in any dealings concerning away from reactor sites in Illinois we would be dealing directly with the State of Illinois.

Mr. CORCORAN. As you well know from the President's message and as you have done here this afternoon, you have said a great deal about the need to consult and to work with States as a way to circumvent the veto problem.

Mr. CUNNINGHAM. Yes, sir.

Mr. CORCORAN. I think everybody who is familiar with the problem that confronts us and especially in view of the fact that the State planning council does include responsibility for negotiations on away from reactor interim storage facilities, it is a tremendous omission on your part for Illinois not to be represented.

Mr. CUNNINGHAM. No, sir. I did not mean to imply that. The State planning council will enter into negotiations on any activity between us and the State of Illinois. That will be done directly. What we are asking the State planning council to do is provide us help and advice on how this procedure can best take place but not to enter into specific negotiations on a specific site.

Mr. CORCORAN. I see.

Mr. BROWN. I want to clarify one question. When we were talking about the question of the vitrification storage versus the away from reactor interim storage, are you telling me the vitrification storage process if it is resolved by 1984 will not in any way slow the away from reactor storage problem?

Mr. CUNNINGHAM. Yes, sir. That is correct. I am also saying insofar as any potential high level waste which would have to be vitrified in the commercial nuclear waste side, that will also not be a problem before 1984.

We are saying in terms of solidifying and vitrifying or immobilizing high level waste, at the present time all of that material is in the defense area or virtually all the material. We do plan a very carefully government controlled handling of that waste on an interim basis until the immobilization process is selected.

Mr. BROWN. Thank you, Mr. Chairman.

Mr. MARKEY. Thank you.

As a bachelor, I can say I have been experimenting with a number of media. One of my great fears is divorce. I want to give you my full support in the cautious measures you are now considering.

I will recognize the gentleman from Illinois, Mr. Corcoran.

Mr. CORCORAN. Thank you, Mr. Chairman.

Mr. Cunningham, as I understand your proposal in response really to the more basic question of my colleague from Ohio, what you are saying is we do not have to face up to either reprocessing which would lead to vitrification or some other technology for solving the long-term waste problem because your solution on the commercial side is to have an escape valve with the interim away from reactor storage program you are presenting to the Congress.

It is on that point particularly that I would like to raise some questions.

When will we have, after a year or more of promises, a specific detailed plan from the Department on the magnitude of the storage problem and the specific details as to what you are recommending that the Congress purchase on behalf of the Government in the way of the interim storage facilities?

Mr. CUNNINGHAM. In terms of actual storage requirements and needs, we have prepared an updated version of last year's report which we indicated would be available in April. I believe that report will be available sooner. We can provide you with copies of that information right away.

With regard to a detailed plan for purchase or acquisition or lease of existing facilities or construction of a facility, the program is proceeding in terms of design of that facility and in terms of evaluating sites including existing sites.

In terms of making an actual recommendation or proceeding with that program, we are in need of legislation to go farther on that particular program.

Mr. CORCORAN. As I recall in the hearing that this subcommittee held last year on that specific legislation, Mr. Bateman indicated that the Department had at that time specific answers to questions that we raised then as to an estimate of the acquisition, construction and maintenance costs for each AFR site; the study to determine the need for AFR storage facilities, the cost, the capacity needed; the remaining capacity at each of the powerplants themselves for their onsite storage pools and a calculation of the rate that was involved was also taking place.

I would think at some point this subcommittee would be able to get rather specific information as to the magnitude of the problem you are attempting to solve with the AFR solution.

You have indicated in response to my colleague that there is not much of a commercial nuclear waste management problem in terms of handling and storing the wastes because you are going to solve that problem by the acquisition or leasing or perhaps the construction of one—and you constantly talk in the singular on these AFR facilities—but I think we need the information.

I think we need the information in order to move on the legislation because you were not involved, as I recall, at that time. One of the difficulties with the legislation is the proposal is for a $300 million revolving fund.

I think the Congress is very concerned about wanting to know in advance as a precondition of our appropriations process just what the magnitude of the problem is; what you are going to buy with that money and not simply turn that over in a revolving fund mechanism for the Department to go on its own and purchase these sites, particularly in view of the fact that every action you have taken recently indicates while you protest and you say you want to consult with the States and when we get down to the specific details of Morris, Ill., which is the targeted away from reactor storage facility, what we find is that Illinois is not represented on this wonderful new planning council.

We want the specifics. We need that specific information in advance before further actions can be taken on the legislation that is pending.

Mr. CUNNINGHAM. Mr. Corcoran, I think I may have misunderstood the question as to the information you need. I believe we have available answers to all of the questions which you raised. I will be pleased to provide that for the record.

Mr. CORCORAN. Just in terms of the timing on this, it is my understanding we will be going to mark up perhaps as early as next week regarding the authorization for the Department. I think we would want to have that kind of information for the markup session.

Mr. CUNNINGHAM. Yes, sir.

[Testimony resumes on p. 683.]

[The following material was received for the record:]

RESPONSE TO REQUEST BY MR. CORCORAN

Attached is a copy of DOE/NE-0002, "Spent Fuel Storage Requirements—The Need For Away-From-Reactor Storage," January 1980. This report shows the magnitude of the spent fuel storage problem which utilities face.

The actual acquisition cost of facilities depends on negotiations with storage facility owners. However, an estimated value of an existing facility can be determined by comparing it to a newly constructed storage facility which would cost about $290 million for 5000 metric tons (MTU) of storage. The attached table shows the potential capacities of some existing facilities that are being considered. It is important to note there are some significant differences between the calculated values and the quoted prices.

VALUE OF EXISTING FACILITIES

Facility	Capacity (MTU)	X	Storage Cost ($/MTU)	=	Total ($M)	-	Rerack Cost ($M)	=	Value ($M)	Planning Cost ($M)	Quoted Price ($M)
GE	350		58,000[1]		21		--		21	30	30[6], 40[7]
	750				44		15[2]		29	38.5[5]	
	2450				143		48[3]		95	71.5[5]	
AGNS	400				24		--		24	100	220-360[8]
	1750				102		20		82	120	
	2250				131		25		106	--	
NFS	85				5		--		5	0	--
	1500				87		13[4]		74	13	

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[1] This is a preliminary cost, and the next fee will probably result in an increase. The cost is based on a cost of $290 M for a 5000 MTU facility including site purchase which was recently developed by DuPont for DOE.

[2] Includes $8.5 M for rerack and $6.5 M for radwaste handling.

[3] Includes costs in #2, $28 M for new pool, and $5 M for increased receiving capability.

[4] Scaled from $8.5 M for GE rerack (1100 MTU) to 1500 MTU. The cost is for reracking only.

[5] This cost is for reracking only and does not include the cost of radwaste handling.

[6] Information Memorandum to John M. Deutch, Assistant Secretary for Energy Technology, from Sheldon Meyers, Program Director, Office of Nuclear Waste Management.

[7] Statement of Bertram Wolfe, General Electric, before Subcommittee on Energy and Power of the Committee on Interstate and Foreign Commerce, U.S. House of Representatives, June 26, 1979.

[8] Statement submitted to Congress by AGNS, June 26, 1979. The $360 million cost is the sunk cost for the entire reprocessing plant which includes capital expenditures, pre-operational expenses, and interest on investment. The lower end of the range ($220 million) is contained in a letter to Honorable Edward J. Markey, House of Representatives, from John M. Deutch, Assistant Secretary for Energy Technology. This cost only includes capital expenditures.

DOE/NE-0002
UC-70

Spent Fuel Storage Requirements— The Need For Away-From-Reactor Storage

AN UPDATE OF DOE/ET-0075

January 1980

U.S. Department of Energy
Assistant Secretary for Nuclear Energy
Division of Spent Fuel Storage and Transfer
Washington, D.C. 20545

I. INTRODUCTION

The analyses of on-site storage capabilities of domestic utilities and estimates of timing and magnitude of away-from-reactor (AFR) storage requirements were presented in the report DOE/ET-0075 entitled "Spent Fuel Storage Requirements - The Need For Away-From-Reactor Storage" published in February 1979 by the U.S. Department of Energy. Since utility plans and requirements continue to change with time, a need exists to update the AFR requirements estimates as appropriate.

This short report updates the results presented in DOE/ET-0075 to reflect recent data on reactor operations and spent fuel storage. In addition to the updates of cases representing the range of AFR requirements in DOE/ET-0075, new cases of interest reflecting utility and regulatory trends are presented.

II. SUMMARY

A wide range of AFR requirements result from varying the parameters impacting spent fuel storage. Figure 1 shows the estimated upper bound, lower bound, and the planning base for AFR storage and/or disposal requirements. The amounts of spent fuel stored in the AFR's in each of these cases is only a small portion of the fuel discharged from the reactors as shown in Figure 2.

The data from the utilities and the current regulatory and institutional climate lead to the following conclusions:

A. Utilities are moving toward maximum reracking.

B. Transshipment should serve as a backup to meet short term and emergency needs and should not be a planning base for all reactors.

C. Though the upper range of storage estimates has been reduced, a firm requirement for AFR services still exists.

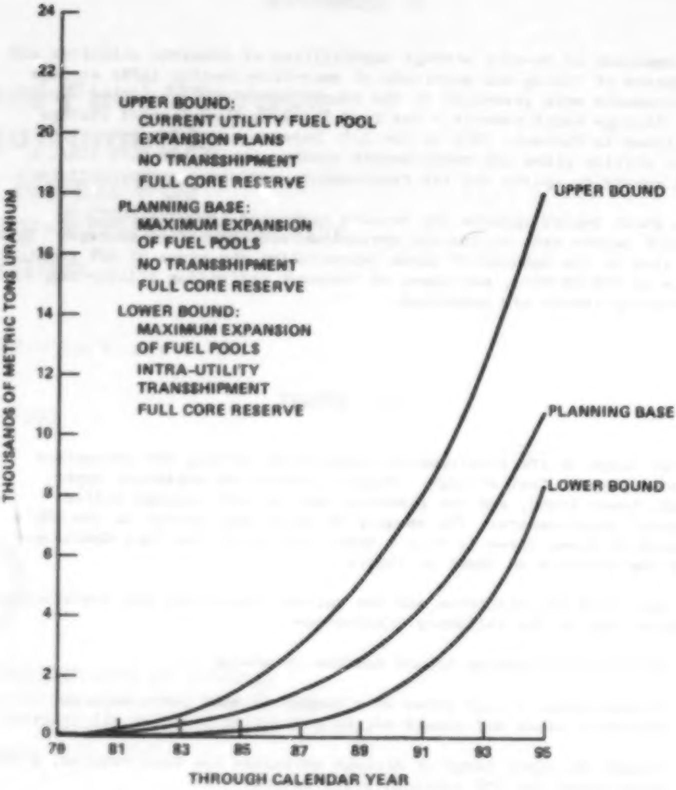
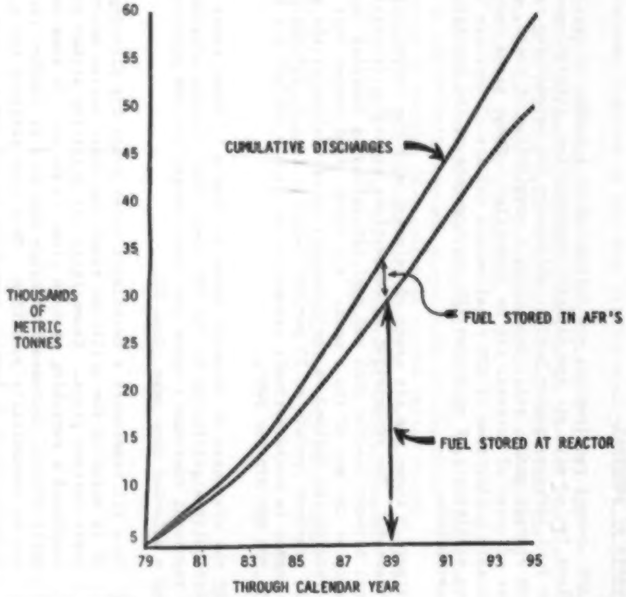


FIGURE 1. RANGE OF AFR REQUIREMENTS FOR PLANNING PURPOSES

FIGURE 2

COMPARISON OF AFR REQUIREMENTS AND FUEL STORED AT REACTORS



ASSUMPTIONS:

DISCHARGES - FROM CURRENTLY OPERATING OR PLANNED REACTORS

AFR REQUIREMENTS - BASED ON MAXIMUM BASIN EXPANSION PLANS AND NO TRANSSHIPMENT

SPENT FUEL STORAGE
1/80

III. DISCUSSION OF THE RANGE OF AFR REQUIREMENTS ESTIMATED FOR PLANNING PURPOSES

A. Cases of Interest

AFR storage requirements are influenced by a number of factors such as plans for on-site storage capacity augmentation, transshipment of spent fuel between reactor basins, philosophy for maintaining reserve in the storage pools, etc. Upon using a combination of these, a number of cases of interest can be identified. These cases represent reasonable projections of AFR requirements and are of interest because of the sensitivity of projected AFR requirements to the variation in the parameters.

Figure 3 shows the six cases of interest with the corresponding AFR requirements. The explanation of assumptions regarding transshipment of fuel between reactor pool and pool expansions is detailed in the glossary at the end of the report. All these cases assume that a full core reserve (as defined in the glossary) is maintained at the storage pools, reactors operate at 70 percent capacity factor, and the average fuel burnup is conservatively assumed to be 23,000 MWD/MTU for BWR's and 31,000 MWD/MTU for PWR's.

Of the six cases of interest shown in Figure 3, three cases are of particular significance to the DOE spent fuel storage program since they represent reasonable upper and lower bounds for DOE planning around a selected base case (Case V).

- Case III represents a reasonable upper bound for planning purposes. It is based on the utilities expanding their basins according to their current plans. Essentially all utilities either have completed a reracking or have plans to do so. In some cases the small overall increase in storage capacity by further reracking may not be economically justified. This case reflects the possible scenario where no further reracking beyond current plans occurs. It also does not assume transshipment between reactors unless specified by the utilities. In view of strong intervenor opposition to transshipment, this assumption appears valid for an upper bound estimate.

- Case V has been chosen as the new DOE basis for planning purposes. It assumes that the utilities expand their reactor basins to the maximum capability they have estimated. As in Case III above, transshipment is not assumed unless specified. Recent information from the utilities confirms that this case best represents the situation that is likely to occur. Most utilities are moving toward maximum expansion of their existing reactor basins. However, many have indicated that transshipment should not be included in the base case planning. It represents a possible emergency stop-gap measure.

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- Case VI presents a lower bound estimate of storage requirements for planning purposes. It contains the same maximum expansion plans as the base case, but also assumes one transshipment of fuel between reactors in the same utility when possible.

Table 1 presents the cumulative annual projection of reactor discharges from the presently committed reactors and the AFR requirements for the three planning cases discussed above. One finds that over 85 percent of the spent fuel is still projected to be stored in on-site reactor basins in DOE's base case.

Table 1 also shows the AFR requirements if foreign fuel is included. As described in DOE/ET-0075, current projections utilize three conceptual levels of foreign fuel delivered to the United States (Options 1, 2 and 3). In this case only Option 2, limited to a total of 1000 MTU, is utilized. Using Case V, the total AFR requirements for foreign and domestic spent fuel are shown.

As before, foreign fuel is projected to have a very small impact on the AFR storage requirements.

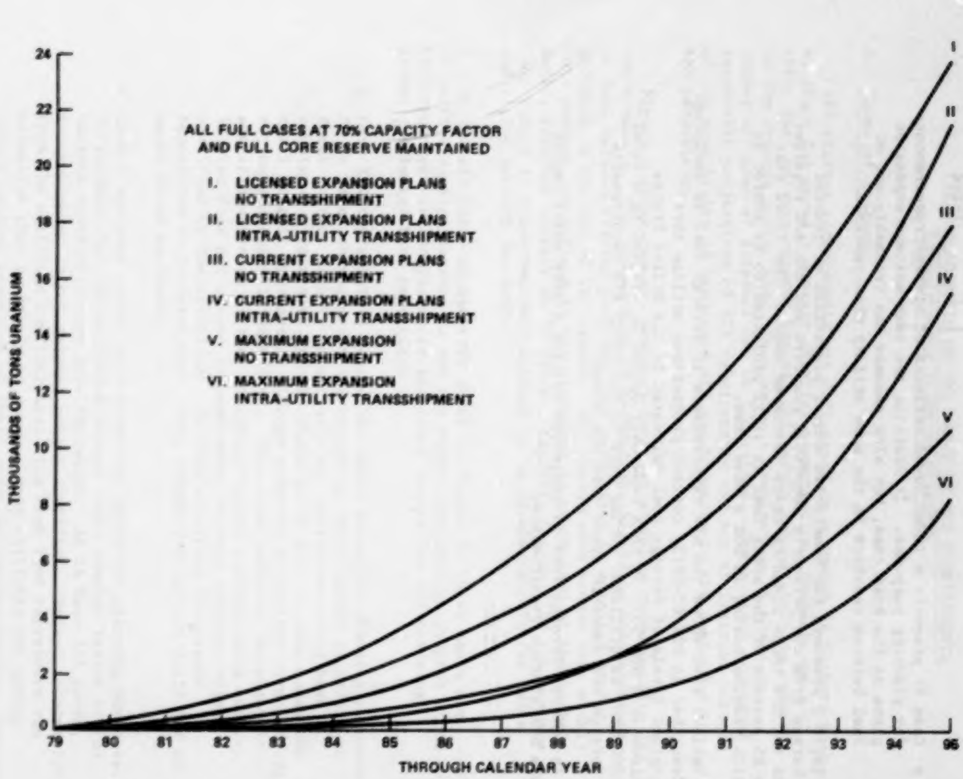

FIGURE 3. COMPARISON OF CUMULATIVE AFR STORAGE NEEDS CASES OF INTEREST.

TABLE 1

CUMULATIVE AFR STORAGE REQUIREMENTS

(MTU)

Year	Cumulative U.S. Reactor Discharges	Domestic AFR Requirements Upper Bound	Domestic AFR Requirements Planning Base	Domestic AFR Requirements Lower Bound	Foreign Requirements	Planning Base Total (U.S. & Foreign)
1981	9,102	210	186	22	50	236
1982	10,900	334	280	97	100	380
1983	13,103	617	377	171	220	597
1984	15,740	962	529	233	340	869
1985	18,727	1,457	755	309	435	1,190
1986	22,312	2,238	1,047	385	575	1,622
1987	26,202	3,119	1,491	465	690	2,181
1988	30,425	4,091	1,985	556	885	2,870
1989	34,836	5,147	2,532	899	1,000	3,532
1990	39,368	6,485	3,277	1,586	1,000	4,277
1991	44,105	8,080	4,271	2,367	1,000	5,271
1992	48,965	10,061	5,534	3,219	1,000	6,534
1993	53,894	12,472	7,013	4,375	1,000	8,013

ASSUMPTIONS:

- FULL CORE RESERVE MAINTAINED FOR ALL CASES
- UPPER BOUND-CURRENT EXPANSION PLANS-NO TRANSSHIPMENT
- PLANNING CASE-MAXIMUM POOL EXPANSION-NO TRANSSHIPMENT
- LOWER BOUND-MAXIMUM POOL EXPANSION-WITH TRANSSHIPMENT
- FOREIGN DEMAND-OPTION 2 OF DOE/ET-0040-D-DRAFT EIS ON STORAGE OF FOREIGN FUEL
- CUMULATIVE DISCHARGES BASED ON CURRENTLY OPERATING AND PLANNED REACTORS AND INCLUDES FUEL ALREADY SENT TO STORAGE AND PROCESSING FACILITIES. THE AFR REQUIREMENTS EXCLUDE THIS FUEL.

IV. GLOSSARY OF TERMS AND DEFINITIONS

Current Utility Expansion Plans:

The reactor on-site spent fuel storage pools are expanded in accordance with the latest utility plans, regardless of the current licensing status of the plans.

Full Core Discharge Capability:

A reserve is maintained in the on-site spent fuel storage to prevent extended reactor outages in the event a core must be discharged. For the cases where spent fuel storage is shared by two or more reactors, reserve for only one core is maintained. To be realistic, the full core reserve is temporarily allowed to be violated if it is to be regained within two years by fuel pool expansion. This permits some reactors to operate for periods up to two years without full core reserve. However, a reserve for normal reactor discharge is always maintained.

Intra-utility Transshipment:

Fuel assemblies discharged from any reactor are permitted to be transshipped to one intermediate site before shipment to Federal facilities; that site is chosen as the spent fuel storage for the same kind of fuel (BWR or PWR) within the operating utility's system having the maximum available capacity. Thus, when it becomes necessary for any pool to ship fuel, the oldest fuel in the pool is chosen. If the fuel originated from the reactor at the site, it is shipped to another pool within the utility (chosen as before). If the oldest fuel originated at another reactor, it is shipped to the Federal facilities. Of course, if and when there is no space available for transshipment of fuel, then all fuel is shipped to the Federal facilities.

Licensed Expansion Plans:

Current fuel storage capacity on-site is allowed to be expanded within the limitations of the storage capacity that has been licensed by the Nuclear Regulatory Commission (NRC). Thus, in this pool expansion option, it is assumed that the utility plans, not currently licensed by NRC, do not materialize.

Maximum Expansion Plans:

In this pool expansion option, reactor spent fuel storage pools are expanded to the maximum estimate in the selected year (1985) or at startup, whichever is later; prior to that, pool expansion is assumed to be according to current utility expansion plans.

Whenever possible, a utility provided maximum storage capability is utilized as the maximum estimate. In the instances the utilities could not provide a maximum, an S. M. Stoller Corporation-generated maximum is used, after having been reviewed with the appropriate utility.

No Transshipment:

Fuel discharged from a reactor, unless already shipped off-site or committed to an existing AFR storage, is assumed to be stored only in the reactor's own spent fuel storage before being shipped away to Federal facilities.

Normal Discharge Capability:

A reserve is maintained in the on-site spent fuel storage to accept the estimated normal discharge batch due in the following calendar year. For PWR reactors, every tenth year of operation a full core reserve capability is maintained since these reactors must discharge the full core for the mandatory In-Service Inspection (ISI) every decade. If the storage pool is being expanded and will have a full core reserve on expansion, the mandatory ISI is permitted to be postponed for a maximum of one year.

Mr. MARKEY. The gentleman from Tennessee, Mr. Gore.

Mr. GORE. Thank you very much, Mr. Chairman.

Mr. Secretary, when is the administration going to review the reprocessing decision? Is that going to be reviewed any time soon?

Mr. CUNNINGHAM. Perhaps not in the sense that you are asking. The international nuclear fuel cycle evaluation which has taken place on an international basis will be concluded next week with a session in Vienna.

Mr. GORE. It is going to be extremely critical of the U.S. policies, is it not?

Mr. CUNNINGHAM. I do not think so.

Mr. GORE. Have there not been preliminary indications to that effect?

Mr. CUNNINGHAM. No, sir, not in that sense.

Mr. GORE. In what sense?

Mr. CUNNINGHAM. I think the key thing you will see in the results from the INFCE reports is that all of the Nations want to keep their options open.

Mr. GORE. Except the United States.

Mr. CUNNINGHAM. The United States wants to keep its options open also. We want to keep the options open on the breeder, but at the same time relative to reprocessing, I think the kinds of conclusions that are coming both out of the studies there as well as our own studies here under our NASAP program indicate there is little or no economic incentive for reprocessing for thermal reactors.

Mr. GORE. Let's keep oranges separate from apples. That has nothing to do with the reason why the administration decided to foreclose the option, does it?

Mr. CUNNINGHAM. The reason for foreclosing the option was one to put a little time and space in the process so we can evaluate what is occurring with regard to spread of sensitive facilities; in this case reprocessing facilities throughout the world.

Mr. GORE. Has that been a success?

Mr. CUNNINGHAM. I think it has been a success.

Mr. GORE. You think we have caused other nations to stop or slow down their programs by our decision?

Mr. CUNNINGHAM. I do not know whether we caused it or not but they have slowed down and there have been no new reprocessing facilities built since the beginning of the INFCE program and in fact a number of the larger ones have been delayed.

I think the key thing here is that reprocessing is far more valuable for the breeder program and I think there is ample time there to assure that international safeguards are built into the design and built into the entire process before we proceed into constructing reprocessing plants for breeders.

Mr. GORE. Let me move onto something else. You have absolutely no money in this budget request for an AFR, yet AFR's appear to be critical to this new policy. Why is there no money in the budget?

Mr. CUNNINGHAM. We have indicated that we need legislation in order to either acquire or build a large AFR. We do have $21 million which will support the continuing research and development and design efforts.

Mr. GORE. You need legislation for a lot of the things that are included in the budget but that does not prevent you from including them in the budget. I do not quite understand why it is not listed in the budget.

Mr. CUNNINGHAM. Our original proposal was for a revolving fund of $300 million. It is correct that is not included in the budget as a line item.

Mr. GORE. Why not?

Mr. CUNNINGHAM. We are still waiting for action on the Spent Fuel Act of 1979 which is still before Congress to my understanding.

Mr. GORE. Perhaps I can explore that with you separately.

I have a problem with the whole concept of an AFR. It seems to me you double all of your transportation and handling risks. You have three options. You have onsite storage. You have some kind of permanent storage. You have an AFR.

It seems to me that the rationale for an AFR is entirely political. The biggest risk factors barring some geological catastrophe are in handling and transportation. If you take it from the site to an AFR then later take it from an AFR to permanent storage, are you not doubling your handling and transportation risks?

Mr. CUNNINGHAM. We have not attempted to propose AFR's which would take all spent fuel and store it, in which case I think the statement you are making would be correct. We are saying that there are contingency cases and there are cases involving international spent fuel storage where it is desirable to have storage capacity.

In that case I think it is better to have a centralized AFR. We find cases occurring now where it is necessary to shuffle fuel between two reactors simply because one reactor has space and another does not. That process is likely to continue for some time in spite of the fact we are encouraging utilities to rerack their existing facilities and to expand their existing facilities.

Mr. GORE. Under what conditions would an AFR accept spent fuel from a reactor? Would you first require reracking?

Mr. CUNNINGHAM. We have not specified a firm requirement per se. We have said it is our policy to encourage utilities to do all those things which they can reasonably do before the Government would accept it. In my viewpoint that would include reracking.

Mr. GORE. In your opinion they ought to be required to rerack and you ought to require onsite expansion if it is possible before accepting wastes in an AFR?

Mr. CUNNINGHAM. Reracking, yes, sir. Onsite expansion involving new construction should not be required.

Mr. GORE. Is the international wastes the primary driving determinant for an AFR?

Mr. CUNNINGHAM. We need some capacity for that. We estimate the total capacity required would be relatively small, probably less than 1,000 metric tons. It is not a large requirement in itself but it is a requirement which would be difficult to handle with existing Government facilities and a requirement which we believe is very important to our international nonproliferation goals.

Mr. GORE. You state that the State planning council will require a full year's support for members travel, permanent staff and subcommittees. It will expire in 6 months. I wonder when we will see legislation. I also would like to hear from you how much staff you think it will have and what portion of the budget is likely to be spent on staff.

Mr. CUNNINGHAM. I cannot answer the latter questions directly at this time because as I indicated the first meeting of the State planning council is scheduled next week.

I would estimate we are talking initially about a staff of five or six people to support them. As far as the legislation is concerned, it is my understanding draft legislation is already in preparation. I would hope that it would be presented to the Congress fairly soon.

Mr. MARKEY. The gentleman's time has expired.

Mr. GORE. Thank you, Mr. Chairman.

Mr. MARKEY. I would like to discuss your policy of constructing AFR's as opposed to encouragement of expansion of onsite capacity going beyond reracking to include construction of additional pools. Expansion of onsite capacity would mitigate the transportation problems that arise in the AFR policy. Do you have a policy as far as whether or not you would encourage onsite expansion as the preferred alternative to be developed before AFR's are considered as the national policy?

Mr. CUNNINGHAM. First of all, I should say that all of the storage capacity at reactor sites as well as any additional storage capacity would have to be licensed and regulated by the Nuclear Regulatory

Commission. Any new storage capacity would also have to meet the same criteria.

In general what we are saying is our policy would encourage utilities inasmuch as possible to work out a solution to the fuel storage problem. In working out that solution, I suppose we would neither discourage or encourage separate away from reactor sites.

Mr. Markey. Why would you not encourage?

Mr. Cunningham. We are encouraging them to expand their own capacity but without telling them specifically how to do this. In some cases it would be very reasonable for a group of utilities or a single large utility to build away from reactor storage and in that case we would encourage them to do so.

On the other hand there are cases of small utilities where this simply is not reasonable.

Mr. Markey. What about building an additional pool onsite, and not AFR?

Mr. Cunningham. An additional pool onsite, as long as it met the siting criteria, would be perfectly acceptable as far as we are concerned.

Mr. Markey. Acceptable and encouraged or just acceptable, that's the question, if you had a choice between an AFR or onsite expansion.

Mr. Cunningham. I think our general preference would be a separate away from reactor storage facility. There is an advantage both in terms of siting and in terms of economics and in terms of engineering and control of the facility if you have a single large facility which can handle large quantities of fuel.

If you have a reactor which needs some small additional amount of storage and looking at the overall utility financial situation, the overall utility situation with regard to the number of reactors they have, it may make sense in some cases for them to build additional storage on site.

We are saying if we are looking at it either from a national standpoint or from a regional standpoint it makes more sense to talk about large away from reactor storage sites.

Mr. Markey. Does the DOE agree with the proposed NRC procedures for licensing a high-level waste repository? I refer particularly to the requirement that DOE extensively characterize several sites, including sinking a shaft and underground testing, before it can win approval?

Do you agree with that policy?

Mr. Cunningham. It depends on how you interpret what their proposed requirement is. We have not had detailed discussions with them. We may not have any differences. If we interpret their proposal as requiring sinking of a very large shaft and extensive characterization as a result of sinking that very large shaft, then we would disagree because we think it is a far too expensive process for site characterization.

Mr. Markey. Do you think you could live within the NRC's $20 million per site estimate for the site characterization?

Mr. Cunningham. Our estimate of site characterization is that it could be as high as $100 million per site. I would like to say that it is my personal opinion that site characterization need not be as extensive as it appears in the Federal Register and in fact we can work out a reasonable site characterization with the NRC such that both our concerns and theirs will be answered for far less money.

Mr. **Markey**. You are saying you do have some substantial disagreement with the extent to which the NRC would like to see you go in the site characterization proposal. You think their $20 million estimate is unrealistically low given some of the demands they would impose on you in their regulations?

Mr. **Cunningham**. Yes, but I think it is unfair to give a critical analysis at this time because we have not gone through the process of setting down with the Commission and trying to understand exactly what they require and trying to express some of our concerns.

I do not know that there is a major issue. I am just saying if you look at what is presently written down, it appears there could be an issue.

Mr. **Markey**. Consistent with the President's February 12 nuclear waste policy statement, does the DOE intend to characterize the WIPP site at Carlsbad, N. Mex.?

Mr. **Cunningham**. Yes, sir.

Mr. **Markey**. Are you going to be able to do it consistent with NRC requirements? Have you made that analysis yet?

Mr. **Cunningham**. Yes, sir. There is no question that eventually all the sites have to be characterized according to their requirements because we intend to license the site and the repository once it is selected.

Mr. **Markey**. What are the functions of the three test facilities described on page 5 of the fact sheet accompanying the President's statement? Are they the site characterization projects?

It says "Three test facilities are planned: a granite facility in Nevada, a basalt facility in Washington State, and a salt facility in a site yet to be chosen."

Mr. **Cunningham**. These are the test facilities where we will conduct either nuclear or nonnuclear tests in place in order to obtain information such as heat transfer characteristics; determine spacing between canisters of waste or spent fuel and carry out the experiments that are necessary to design a repository.

Mr. **Markey**. How much money is budgeted for these?

Mr. **Cunningham**. I will provide the exact numbers for the record but it looks like a total of about $11 million.

[The following response was received for the record:]

A total of $10.4 million is included in the fiscal year 1981 budget for construction of these facilities.

Mr. **Markey**. Thank you. The Chair's time has expired. The Chair recognizes the gentleman from Michigan, Mr. Dingell.

Mr. **Dingell**. Thank you for your kindness. I have no questions at this moment.

Mr. **Markey**. The Chair recognizes the gentleman from Ohio, Mr. Brown.

Mr. **Brown**. Thank you, Mr. Chairman.

About a year ago the administration submitted the spent fuel storage bill to the Congress. It seems to me like the old story about the abandoned child, they kind of left it on the doorstep, rang the door bell and ran.

What is the status of that bill? Has the administration decided just to not actively support it because there are too many other irons in the fire or is the paternity still claimed and are they going to push the bill or not?

Mr. CUNNINGHAM. My understanding is the bill is still before the Congress. I also understand that some difficulties exist with the bill particularly involving features such as the revolving fund.

To my knowledge there has not been any resolution of the particular issue of how we should proceed.

Mr. BROWN. Do I understand you to be saying after the bill is submitted there is now a difference of opinion within the administration as to whether the bill could be improved by some further modification?

Can we anticipate another bill being submitted? Has the administration changed its position?

Mr. CUNNINGHAM. No, sir. The President's statement on the waste management policy supported the need for away-from-reactor storage. The only point I was trying to make was, in terms of working out some kind of arrangement with Congress, I feel quite confident that the administration would be willing to work out some arrangement with Congress in order to get a bill which is acceptable to Congress.

Mr. BROWN. How is that being pursued? With whom is the administration working trying to get this so-called agreement with the Congress?

Mr. CUNNINGHAM. There are a number of bills in Congress in addition to the administration bill. With regard to the away-from-reactor portion of the bill, Senate bill 2189 would be acceptable to the administration.

Mr. BROWN. Are they working with some Senator? Are there Senators or somebody who are going to control this and have a veto over it?

Mr. CUNNINGHAM. We have indicated that we would support the AFR portion of Senate 2189.

Mr. CORCORAN. Will the gentleman yield on that point?

Mr. BROWN. Yes.

Mr. CORCORAN. The question I have is in connection with the legislation. As was indicated earlier, at least there is the possibility that we will be moving toward markup of the pending legislation which includes the question of the acquisition or leasing or construction of what I am now beginning to realize is some large centralized away-from-reactor storage facility. But in view of the urgency and of the concern the President expressed in his waste management message, might we expect at some time prior to that markup session that we will get some dollar figure as to the amount of money that the Department needs in order to take whatever action it wants to recommend to us in terms of purchasing, leasing or constructing a temporary away from reactor storage facility?

Mr. CUNNINGHAM. Yes, sir. We have previously indicated, I believe that the amount of money we need is on the order of $300 million.

Mr. CORCORAN. That was for a revolving fund.

Mr. **Cunningham**. Yes, sir. That $300 million is based on our estimate in order to acquire or construct a facility.

Mr. **Corcoran**. What would that buy?

Mr. **Markey**. If I might add just by way of additional information, the existing Morris facility in Illinois, the Barnwell facility in South Carolina, and the new 5,000 metric ton facility will cost approximately $799 million. The administration has asked for $300 million in its budget authority in its proposed legislation.

I guess the question is why have you so drastically understated the cost of the AFR program and do you have a specific site in mind, to wit, Morris, Ill.?

Mr. **Cunningham**. Certainly the Morris site is an interesting site to us. We are looking at three existing sites all of which have potential for meeting our near-term needs. Those three sites are Barnwell, the NFS site at West Valley, and the Morris site. With regard to the Morris site it is interesting in the sense that it does have some capacity now and it does have the potential of being expanded.

The facility at NFS is one of the smaller ones. The site which actually has the most capacity today and would have the most capacity in the near future, is probably the Barnwell site.

The point which I am making is that there are pros and cons for selecting any one of these three sites. There are also a few other smaller sites existing around the country which we need to finish evaluating of before we complete our evaluation.

Mr. **Corcoran**. They are very interesting to me also. I would say we are getting down to the point where we have to fish or cut bait on the numbers. When you give us the numbers, then we will know what you are actually seeking. As the acting chairman pointed out, if you are going after all three, you are going after something in the neighborhood of about $800 million at the outset.

If you are simply going after Morris, the stated figure in the hearings last year was $30 million. Your associate was quoted in the Chicago Tribune as saying Morris has now been increased to $100 million. Somebody from G.E. has talked to somebody because the price has certainly more than tripled in 1 year's time.

I know inflation is a serious problem in this country but not quite that bad.

When you tell us what the number is then we will be able to make an informed intelligent decision. Until you give us the number—you can always talk in terms of pros and cons and it is interesting and it may be big or small and it may be in Illinois or up in West Valley. I do not think it is going to be in Barnwell. I am sure the chairman of the State planning council, Governor Riley, will see to that.

Those are the problems which confront us as we are being asked by you and the President to make a decision. We need information from you before we can make that decision.

Mr. **Cunningham**. Yes, sir. I appreciate that. My difficulty is that we have not had serious negotiations. It is hard for us to quote exact prices. In terms of Morris, to the best of my knowledge the $30 million is still a good number. There may be some confusion because there has also been an estimate of $26,300,000 for limited expansion of the Morris facility. That may be where some of the numbers came from.

We have no better numbers now than those which we previously gave you.

Mr. CORCORAN. You understand the quandry in which we find ourselves. On the one hand, last week the President says we should have the legislation that is pending in the Congress and those bad fellows down there simply have not given it to us. On the other hand, when we have the hearing today we learn a year after the legislation has been introduced, a year after we have had hearings on it, a year after that legislation has rested in this subcommittee, after that whole period of time what we learned today is you still cannot give us any numbers.

How can we make a decision? I realize in some places in Washington they make decisions without numbers. In this subcommittee I think we want the numbers.

Mr. CUNNINGHAM. I appreciate that. At the same time I do have to say we really cannot get into serious negotiations without some kind of authority for doing so. We also would like to have good numbers.

Mr. CORCORAN. When you tell us what you are going to do, I think you will get serious consideration of the authority requested.

Mr. CUNNINGHAM. Thank you.

Mr. BROWN. Do you plan to ask for reprograming of funds for the State planning council and, if so, how much do you plan to ask for?

Mr. CUNNINGHAM. The total amount of money which we are proposing to reprogram as far as fiscal 1980 is concerned is $1.5 million. That includes all State/Federal interactions and it includes support of activities at the State level and the development and support of technical staff as well as the State planning council itself.

The State planning council itself should be a relatively small portion of that number. I will try to provide an accurate number for the record. I do not have an exact number for that at this stage.

[The following information was received for the record:]

Since the State planning council was only recently established, we are finalizing the estimate for staff and administrative requirements for fiscal year 1980. We now estimate that we will be asking for about $200–400K.

Mr. BROWN. Where will this appear in the budget?

Mr. CUNNINGHAM. It is reprogramed funds from the terminal isolation account but it will appear as a separate line.

Mr. BROWN. It really comes from the waste isolation pilot program?

Mr. CUNNINGHAM. No, sir. The waste isolation pilot plant program is funded under the Defense program. We are talking about funds from the commercial terminal isolation program.

Mr. BROWN. What happened to WIPP? Where is it?

Mr. CUNNINGHAM. At the present time the President has proposed WIPP be terminated as a Defense project and that the site characterization be picked up under the commercial program in which case the site would be considered for possible future use as a commercial repository site.

At the present time the WIPP program is still proceeding along the same schedule that we have had previously. It has not been terminated and cannot be terminated until Congress takes action on the recision notice which we plan to send to the Congress shortly.

Mr. BROWN. How much has already been spent on the development of this project WIPP?

Mr. CUNNINGHAM. $87 million.

Mr. BROWN. How far will the cancellation set back the waste disposal program—could you have not moved more rapidly under a Defense program than you could under the commercial program because the commercial program will require licensing?

Mr. CUNNINGHAM. Certainly licensing takes time and that has to be factored into the schedule.

Mr. BROWN. Let me ask you to make an estimate on how much more time it will take because it requires licensing.

Mr. CUNNINGHAM. I do not know whether I can answer that per se. Let me try to explain one point. Certain Department of Energy facilities are not required to be licensed. These are facilities which we use for Defense purposes and experimental purposes.

Mr. BROWN. Which do not require licensing?

Mr. CUNNINGHAM. Which do not require licensing.

Mr. BROWN. Therefore would save whatever licensing time there is?

Mr. CUNNINGHAM. The point I am trying to make is that it saves part of the time but not all of the time. In general, for reactor facilities, we do require NRC review and evaluation of the criteria and the safety programs involved.

The normal review process by NRC takes place. That thing which is missing in terms of the schedule is the public interaction and the time required for that is sometimes difficult to evaluate.

We would do a full environmental impact statement. We would have full reviews by NRC. We would not have the public interaction to the same extent that is required in the licensing process.

Mr. BROWN. With all due respect, Dr. Cunningham, let me just tell you the reaction I get. The WIPP program was all but ready to move. It was a Defense program. Defense wastes could be stored to prove the technology of storing without the licensing requirement and all of a sudden that now is to be terminated and we go back to square 1 and start all over again with this as a commercial program requiring licensing.

I just have the feeling and I do not want to use the term "hanky-panky" but it is just being deferred for the sake of delaying a decision in this area for what I guess I can call spiritual reasons.

Mr. CUNNINGHAM. The WIPP facility was originally discussed by the Department of Energy last year and would have included some experiments with spent fuel and high level waste as well as the transuranic wastes. As it was finally authorized it covered work only on the transuranic and high level waste from the Defense program.

It is true that the experimental work on that program will be delayed or conducted on a smaller scale but at the same time the fact that the WIPP facility has been canceled or is proposed to be canceled does not mean that we will cancel all of our research and development and demonstration work on high-level waste. We do intend to continue that work in Nevada and Hanford next year as well as hopefully in a salt test facility as well.

Mr. **Markey**. The gentleman's time has expired. The gentleman from Illinois, Mr. Corcoran.

Mr. **Corcoran**. Thank you, Mr. Chairman.

I have some questions that do not regard Morris.

I think one of the weaknesses in your overall waste management approach is you fail to address the question of what technology to use in order to get the high level radioactive waste in the final form suitable for ultimate disposal.

One of the possibilities if we continue to delay on reprocessing which is at least in my judgment the essential step to getting to the vitrification point is the possibility of encapsulating the spent fuel rods themselves.

What I would like to do is get your assessment of the relative characteristics of the waste if you were to encapsulate the spent fuel rods against the vitrified waste.

Could you tell me generally what your reaction of that is?

Mr. **Cunningham**. My viewpoint is that encapsulated spent fuel can be handled just as safely as encapsulated high-level waste. This is a point of difference between U.S. technical programs and some of the foreign programs because some argue that the safest way to handle the waste is as high-level waste which has been immobilized.

Our experiments do not show that. I personally believe it is just as reasonable to handle one form as another.

We do have experiments on encapsulated spent fuel going on, a bilateral program with the Swedes including some tests in Sweden as well as tests of our own planned for Hanford and at Nevada to confirm this approach. So far it would indicate we can handle either and we can handle either safely.

Mr. **Corcoran**. What would be the comparisons after a 10-year period from the standpoint of heat generation and radiation fields between the spent fuel on a long-term basis as against the vitrified immobilized waste?

Mr. **Cunningham**. In general if you take spent fuel directly from a reactor and package it you would expect there to be a higher heat load from that material. This is one reason for example why the Swedes have proposed storing the fuel on an interim basis for on the order of 40 years before final packaging and final disposal of the material.

As far as the heat generation itself is concerned, obviously that is related to how much fuel you package in one package. In general you are usually talking about higher heat loads with spent fuel, at least if you go directly from the reactor than you would be from high-level wastes.

Mr. **Corcoran**. What about the problem of the pressurized gas which as I understand it is up to 20 atmospheres in the spent fuel assemblies as against immobilized vitrified waste?

Mr. **Cunningham**. The pressure is again somewhat related to the temperature of the fuel. We have considered whether we wished to repackage the fuel or collect the fission gases from the fuel before permanent storage. There are a number of factors like that which we have looked at. Again, regardless of which alternative is selected, I think that it can be safely handled.

Mr. CORCORAN. What about the relative toxicity from the standpoint of the ingestion between the two technologies, say, at a point 500 years and at a point 1,000 years and at a point of 10,000 years? What about the comparisons at that point?

Mr. CUNNINGHAM. The long-term toxicity would always be greater with the spent fuel simply because it contains larger amounts of plutonium which is the longer lived isotope.

On the other hand my personal opinion is that both of the forms would be handled as relatively immobile forms of waste and the likelihood of the material getting into the biosphere would be very minimal.

Mr. CORCORAN. One key difference is you have plutonium stored on a long-term basis in the case of encapsulation and with the reprocessing and vitrification you separate out the plutonium which can be used again through thermal recycle or can be used for some other purpose.

Mr. CUNNINGHAM. That is correct. There is energy value in the spent fuel.

Mr. CORCORAN. There is not only the energy value. We have not even discussed the conservation aspects of this whole matter in terms of reprocessing the unused uranium and plutonium and things like that. I think there are some very critical environmental considerations that ought to be brought to bear here.

The Germans are very concerned about putting the plutonium into the ground on any long-term basis because of the biological hazards and other problems.

It seems to me the message that the President delivered to the Congress last week does not even address that kind of problem. It simply looks at the question and says we have to get this permanent site by some time in the next 5 to 10 years.

That is my concern. You have not really addressed the comparative advantages of the two technologies with respect to some of these environmental considerations.

Mr. CUNNINGHAM. We have looked at it from a technical standpoint. It was the conclusion of the interagency review group that spent fuel could be handled in just as safe a manner for permanent disposal as high-level waste.

My personal view is that plutonium is very difficult to get into the food chain and therefore it is not as difficult to separate from the biosphere as perhaps some of the other radioisotopes of shorter half lives.

It is my understanding that a report which responds to most of those questions which the committee has requested will be ready in about 3 or 4 weeks. That may not be in time for the markup session but we can try to get some of the information over earlier.

Mr. CORCORAN. We would appreciate it.

Thank you.

Mr. MARKEY. Recognizing that the true costs of ultimately disposing of spent fuel are uncertain, would you support legislation that imposes an initial fee to recover only the cost of AFR storage and a second fee at the time of actual disposal of the spent fuel to recover the cost of the repository when they have become more definite?

Mr. **Cunningham**. We have looked at several ways of financing. I think the approach you are discussing might very well be a reasonable one.

The main point we have said is that the cost should be fully recovered from the user. One could make a one-time storage payment at the beginning and then leave open the settlement if later on the fuel were reprocessed or utilized for its energy value. In that case one would expect to subtract out the cost of reprocessing and recovering the fuel and then whatever positive benefit is left over from that could be made available in terms of settlement with a utility or the former owner of the material.

Mr. **Markey**. You are not closed to the concept of having a two-stage process where you first have the initial payment and then some kind of more realistic final settlement of the real cost?

Mr. **Cunningham**. Yes, sir.

Mr. **Markey**. I have another question concerning the ability of utilities and private industry to store onsite nuclear waste. There was an GAO report last year which indicated it would be possible in their opinion with reracking and other techniques for private industry to be able to store for a long period the amount of spent nuclear fuel they are producing.

What do you think about the analysis that was given to Congress by GAO, of the ability of the utilities to store spent fuel onsite through 1985 to 1990?

Mr. **Cunningham**. In general, our experience in working with the utilities has been one of collecting data. The utilities have generally worked very hard to try to make storage space available when it is required.

Our present estimates show that something like about 17 reactors would be without adequate storage space in the 1983–84 time period. Based on our past experience I would expect that to drop down to perhaps six or seven reactors actually requiring storage space at that time.

Based on our best estimates to date we believe there will be a need for some AFR storage in the 1983–84 time period.

Mr. **Markey**. That could include the option of additional onsite storage, additional pools being constructed to take care of that problem?

Mr. **Cunningham**. Yes, sir, since new At-reactor pools could not be built and available at that time.

Mr. **Markey**. What is DOE doing to investigate the charges by Stephen Stalos that DOE hindered the tank surveillance program carried out by the Rockwell contractor at Hanford? Mr. Stalos was for 5 years the Rockwell surveillance manager for the tanks at Hanford. He contends DOE urged Rockwell to minimize reporting of leaks from their tanks.

Mr. **Cunningham**. I think that the report of the Inspector General has been made available to this subcommittee. I believe the findings are that neither DOE nor Rockwell were trying to cover up any activity but, in fact, their actions were aimed at trying to prevent the possibility or potential of leaks occurring in those tanks.

In my viewpoint I think the Rockwell people acted in a responsible manner.

Mr. Markey. I will now turn to the staff for questions. Mr. Ward?

Mr. Ward. I think the Inspector General raised some serious questions as to the forthcomingness of Rockwell by citing their failure to inform him of the report that existed about the classification of tanks as leakers that was not disclosed to him during his visit there in July and by raising questions or establishing some evidence to indicate that was a concerted effort on the part of Rockwell management not to disclose the existence of that report to the Inspector General's Office.

After reading it I cannot say that I would characterize that Rockwell acted in a totally responsible manner. It seems there should have been a positive obligation on Rockwell's management to make that initial report available to the Inspector General knowing he was there to investigate coverups.

Mr. Cunningham. Based on the limited number of discussions I have had on this subject and looking at the report myself and talking to the Inspector General, I do not have the same feeling you do.

I do agree with you that certainly Rockwell has not done the best job in explaining what they are doing and why and how in terms of public perception on the matter. Again I think they have acted in a responsible manner in terms of trying to avoid leaking tanks or trying to avoid any leakage of waste material from those tanks.

Mr. Ward. Presently half those tanks out there are confirmed leakers, are they not?

Mr. Cunningham. That is a difficult thing to estimate. One of the problems we are faced with here is that there have been occasions where as you know due to the instrumentation problems out there it is sometimes very difficult to determine whether there has been an actual leak or not.

The instrumentation on some of the earlier tanks makes it difficult to make those measurements.

In the process of examining the tanks and trying to determine whether there has been any leak or not the contractor has taken the attitude that if there is any question then one should remove the liquid from those tanks rather than take a chance of leaking some of the material and then making a positive determination that the tank leaks.

In fact they have been trying to avoid the leakage of material from the tanks. Once they identify the possibility of a leak they remove the liquid from the tank and they do not go back and try to characterize them as leaking tanks. I think it is this process of trying to avoid any serious leaks that has led to confusion and misperceptions in terms of what is actually going on there.

Mr. Ward. I do not want to get into a long debate. I do not see how you can accept their behavior particularly in terms of not positively and affirmatively acting to disclose the existence of that preliminary report to the Inspector General when he was onsite.

I think there was an obligation to disclose and they failed to do that. I am not arguing as to how diligently they are trying to contain their leaks out there.

Mr. Cunningham. I agree there certainly should be full disclosure and full cooperation with the Inspector General. The only point I was making is I did not have the impression from talking to the Inspector General that he felt he had difficulties along that line.

I certainly agree with you that it should be that way.

Mr. **Ward**. It was discussed in the body of the report. I got a very hostile tone out of reading that section of the report.

Mr. **Cunningham**. I agree with you. I said I did not get a hostile tone from talking with the Inspector General.

Mr. **Markey**. I am going to recognize for one brief question the gentleman from Illinois.

Mr. **Corcoran**. Thank you, Mr. Chairman. I appreciate your indulgence.

There is one subject that still has me in doubt and that is the question of the one time storage fee. It is my understanding that in the past the position of the Department was that there would be a one-time storage fee along the lines of the enrichment fee payment procedure.

If I understood the response of the witness, it appears to me there has now been a change in position and you are talking about a two step fee. Could you clarify that?

Mr. **Cunningham**. I think what we had said was we would work out a one-time storage fee on the basis that the fuel would be permanently disposed of. This is consistent with the present policy of not reprocessing the fuel.

At the same time we felt there should be some options so that if the U.S. policy were to change and later it is decided to reprocess that fuel, then in fact the utility has some interest in the energy value in that fuel. We could leave that possibility open although there would be no certainty that it would ever occur.

Mr. **Corcoran**. I thank the chairman.

Mr. **Markey**. The Chair recognizes the chairman of the subcommittee, the gentleman from Michigan, Mr. Dingell.

Mr. **Dingell**. Thank you.

Gentlemen, can you explain to me why it is that the administration has contemplated a program of spent fuels which will essentially remove not only the spent fuels but the recoverable units of nuclear materials together with plutonium permanently from the supply chain?

Mr. **Cunningham**. As you know, Mr. Dingell, we have considered this in light of our present policy on nonproliferation where we have taken the approach of trying to discourage other nations from widespread use of sensitive facilities such as reprocessing facilities.

Mr. **Dingell**. The hard fact of the matter is a lot of nuclear spent fuel is being reprocessed in the world. The world is full of plutonium and nuclear materials. Other countries are building nuclear weapons from plutonium derived from spent nuclear fuels. There is regular trade in nuclear materials which have gone through a nuclear reactor and are readily convertible into bombs, or in uranium if it is of sufficiently enriched grade to be used in nuclear weapons.

Why is it we are embarking on a policy that is ultimately going to remove these potential resources, both the nuclear materials and the plutonium which are present in spent nuclear fuels totally from availability to society?

Mr. **Cunningham.** I think that total removal from beneficial use to the society is not quite correct because——

Mr. **Dingell.** When you deposit it in a salt dome the salt dome collapses and the stuff is gone.

Mr. **Cunningham.** Yes, sir, if that happens you are quite correct. At the same time we do have the breeder program. We are trying to maintain a breeder option in this country. We will need to reprocess fuel for the breeder reactor.

Mr. **Dingell.** You also will need access to it. You have the additional problem that we are today processing in this country lower and lower grades of uranium, are we not?

Mr. **Cunningham.** Yes, sir. That is quite true.

Mr. **Dingell.** What has the concentration fallen from as to what we used to be producing?

Mr. **Cunningham.** I will have to provide that for the record.

[The following response was received for the record:]

Concentration of uranium in ore fed to the mills has decreased from 6.4 lbs U_3O_8 per ton (0.32 percent U_3O_8) in the early 1950's to about 5.0 lbs (0.25 percent U_3O_8) in the early 1960's, about 4.0 lbs (0.20 percent U_3O_8) in the early 1970's, and for 1979 2.2 lbs U_3O_8 per ton (0.11 percent U_3O_8). Some of this decrease can be attributed to higher uranium prices and improved production technology.

Mr. **Dingell.** It is down significantly, is it not, in terms of the concentration of uranium per unit of ore mined?

Mr. **Cunningham.** We still consider it to be high grade ore. It is certainly not like from shale or granite or sea water or anything of that low level. It is a lower grade in general.

Mr. **Dingell.** It is strikingly lower than that which is being mined, let's say, in South Africa and the Soviet Union or in other places?

Mr. **Cunningham.** I will provide that for the record.

[The following response was received for the record:]

Uranium produced in South Africa is a byproduct of gold mining and is much lower grade than the United States, i.e., less than 1.0 pound per ton, about 0.02 to 0.3 percent U_3O_8. Much of the Canadian production to date has been lower grade than that from the United States. The U.S.S.R. does not release related statistics. In general, foreign countries have considered U.S. production "high grade", but this will change when the new higher grade Australian and Canadian deposits start production.

Mr. **Dingell.** We cannot just throw this material away. When do you expect us to have exhausted the run and the availability of high grade uranium?

Mr. **Cunningham.** Our present estimate at least in the United States is that we have adequate high grade uranium ores at least into the first decade and probably the second decade of the 21st century.

Mr. **Dingell.** You are talking about 20 years or a little more and perhaps 30 years?

Mr. **Cunningham.** We are saying certainly about 2010 or 2020 is when one would begin to get into real trouble.

Mr. **Dingell.** That is not very long off. It takes how long to open a mine?

Mr. **Cunningham.** The question of opening the mine is not so much the problem. The overall production capacity would be a serious problem. That is usually the constraining factor in any expanding uranium requirements.

Mr. **Dingell**. We sent down to the Department of Energy a series of questions on January 16. The response to those was received today. Can you tell me why it took so long to get the answers? We wanted to have them for purposes dealing with these questions at the hearing.

Mr. **Cunningham**. My understanding was the questions were due on February 15 and we certainly did not meet that date. I myself have been trying to find why we had the delay because most of the answers were prepared earlier than that. The best explanation I have found to date is that we had one or two classified questions and answers included in that package somehow the process did not get those separated out in time to get the other package over.

Mr. **Dingell**. You must understand that it was, in the view of the subcommittee, important that we should have these responses in time so that we could address the questions in connection with the hearing.

Mr. **Cunningham**. Yes, sir.

Mr. **Dingell**. If you have problems with regard to classified matters which appear there, we have no objection to having them excised and a later response being made in the appropriate fashion for discussions with the subcommittee staff. I think that is entirely proper and we would support you quite actively.

It is quite distressing for me to find that we have this kind of delay because there were questions here the staff were quite interested in and some of the members were interested in so we could have some of our hearings to address the questions. I hope the next time we will not have this kind of delay.

Mr. **Cunningham**. Yes, sir. I agree. I am also distressed to find that it took so long. I apologize.

Mr. **Dingell**. Thank you.

Mr. **Markey**. The Chair recognizes the subcommittee staff. Mr. Ward?

Mr. **Ward**. I have some budgetary questions. In your request for remedial action, under the uranium mill tailings program, you ask for $13.2 million. That brings you roughly to a cumulative total of about $23 million if you include last year's request.

This act is now 2 years old. Are you proceeding rapidly or slowly? How are you proceeding?

Mr. **Cunningham**. In some of the programs we are making some fairly rapid progress. I think for example the work at Grand Junction is moving along very rapidly.

Mr. **Ward**. In Grand Junction, are you talking about cleaning up the structures or uranium mill tailings?

Mr. **Cunningham**. At the moment I am talking about the structures.

Mr. **Ward**. Let's talk about mill tailings first. How many sites are you going to begin work on next fiscal year?

Mr. **Cunningham**. In terms of the specific answer to your question we are being held up right now by the lack of EPA criteria.

Mr. **Ward**. Has EPA failed to meet the deadline contained in the act for promulgating criteria?

Mr. **Cunningham**. Yes.

On the other hand I think it is fair to say they had a relatively short time.

Mr. **Ward**. EPA told us they could have those criteria out in 6 months. We gave them a year to do it. It was more than they asked for. Now you are telling me they have not met the deadline. That is a matter that we will pursue with EPA.

What is the estimated total cost of this program now?

Mr. **Cunningham**. It depends on how far you go. It could be as high as $300 million.

Mr. **Ward**. Is that the Federal share or total cost?

Mr. **Cunningham**. Federal share.

Mr. **Ward**. That is a substantial increase over what the initial estimates were of what the total cost was going to be.

Mr. **Cunningham**. I cannot answer the question with regard to the original estimate.

Mr. **Ward**. It was around $150 million to $200 million.

Mr. **Cunningham**. One point which I would make is that we are finding as we evaluate the sites a number of cases that when you do the complete survey you find there is more than one local area associated with what we thought was the original site.

Mr. **Ward**. I find this somewhat disturbing because you come in and you say you want to do a program and you give us a cost estimate of what that program is and we go through some serious discussions over how much the State is going to have to pick up based on the cost of that program and then you say now we are into the program it is going to be much more expensive than we thought it was going to be.

You are about to make the same mistake with this proposed legislation on cleaning up DOE's surplus facilities.

Can you give me an estimate of what that is going to cost?

Mr. **Cunningham**. We are talking about roughly 450 sites on DOE property and on the order of $500 million through the year 2000.

Mr. **Ward**. How many of these were commercial activities?

Mr. **Cunningham**. Only a few of these sites were commercial.

Mr. **Ward**. They were all defense related?

Mr. **Cunningham**. Yes, except for a few demonstration and test facilities.

Mr. **Ward**. Weldon Springs was defense related?

Mr. **Cunningham**. Yes. Weldon Springs was part of the AEC production complex that originated with the Manhattan engineering project at the old Malinckrodt plant in St. Louis.

Mr. **Ward**. Malinckrodt operated under contract or did Malinckrodt own it?

Mr. **Cunningham**. Malinckrodt operated the Weldon Springs Plant under contract. The material they were handling was Atomic Energy Commission material.

Mr. **Ward**. Who owns the site now?

Mr. **Cunningham**. Most of the site is under the control of the Army. It is all Government owned. The Roffinate Pits are under the control of the DOE.

Mr. **Ward**. When we get the legislation we will deal with that more thoroughly. There is a concern there about what are we doing now to insure that these costs of cleaning up these facilities are being recovered under the existing contracts so we do not face this problem again.

Your Assistant Secretary for Environment sent up a letter saying now you want to look at the active mill tailings sites to consider the cost of cleaning those up and having those included in the uranium mill tailing legislation.

The initial proposal 2 years ago from the administration was they not be included. Why are you changing your mind on that and how much is that going to cost us?

Mr. CUNNINGHAM. We are not talking about any licensed facilities. The licensed facilities are covered by the NRC.

Mr. WARD. Initially there were a number of sites designated and that was the administration's position. Now the administration has changed its position and it wants to expand the program and it wants to increase the cost of the program and we established certain formula on the basis that these were abandoned sites. A lot of decisions were made on what sites were included and what sites were excluded.

You are now coming back and you want to change the criteria but we cannot change the formula by which funds are given. We could but it is not that easy to do it at this date.

The essential problem is you are proposing all this on a piecemeal basis. You come along and you want to do this and that. You really do not have a program for dealing with all these.

Mr. CUNNINGHAM. I think at the same time it is fair to say that what we are proposing is on the basis of existing knowledge at the time. It is true we proposed only 22 sites at that time.

Mr. WARD. You knew the other sites were there?

Mr. CUNNINGHAM. No; we did not know that some of them were there.

Mr. WARD. You did not know what the extent on the sites were but there was a decision about 11 other sites that you knew were there and the administration's decision was they would not be included under the Mill Tailings Act.

I am talking about sites like Edgemont.

Mr. Meyers?

Mr. MEYERS. We have identified two or three other sites under the Mill Tailings Act as the law stipulated we could do by a certain date. The other sites we are talking about are those that are associated with formerly utilized sites from the Manhattan Engineering District and the AEC.

While it is true we knew many of those sites existed, we did not have information on the extent of the contamination so it would have been almost impossible for us to say how much it would cost to clean it up. It is that kind of information we are getting now.

Mr. WARD. As I recall the letter from the Assistant Secretary, it was a much broader scope that was to be looked at. It was to look at all uranium mill tailings sites other than the two under license right now that had tailings.

Mr. MEYERS. As Dr. Cunningham has said, I find it difficult now to see how the Department would get involved in a remedial action program for active mills where they are covered by NRC.

Mr. WARD. It is not active mills. There are a number of sites where the mills are no longer active and the tailings are still there and they are still on private property. As I recall the letter the Assistant Secretary for Environment wanted to look at those sites that were at inactive mills but were not abandoned sites which was the criteria used under the initial Mill Tailings Act.

Is part of the problem here you are doing one thing and another thing is being done by someone else?

Mr. CUNNINGHAM. I think we are finally beginning to get to the point of your question. There are indeed some abandoned mill sites. Those sites which were not on the original plan would require legislation in order for us to proceed with any work on that. I think probably the point of the letter you are referring to is to suggest that perhaps these should be included in the remedial action program even though they were not originally.

There is nothing that we have in this planned program to work on those without additional legislation.

Mr. WARD. I understand that. I am trying to get at the overall cost of programs. You are coming in on a year by year basis and you are saying last year we spent $10 million and this year we are going to spend $13 million. Outside of that, nowhere included in this budget request is the information you just gave me on the present estimated cost of complying with the Uranium Mill Tailings Act.

Nowhere in here is reference to the possibility of your desire to expand the scope of that act to include new uranium.

Mr. CUNNINGHAM. I think it is fair to criticize the Department on any program that we propose a cost for and do not meet that cost and budget on but at the same time I think it is also fair for us to inform you of situations which occur as we proceed with the program that we think you would like to be informed on and perhaps would agree with us that should be included in the program.

That is quite different from saying the original estimate is different from the present estimate.

Mr. WARD. There is a difference because we passed the piece of legislation based upon addressing certain sites. Now you are saying after having established the formula you want to change the criteria and you want to add more sites to that which do not meet the criteria in the initial act. That is what is troublesome to me.

Mr. CUNNINGHAM. We are suggesting that there are sites that you also may want to agree with us that should be included in the act that were not included in the original act. Obviously if you do not support this legislation then we do not work on them. That is different from a bad cost estimate.

Mr. WARD. There are two factors involved. One is a bad cost estimate and the second is a change in policy.

You have West Valley in here. Last year your official position was no, you did not want West Valley although you were a little ambiguous upon that. You now have $5 million on West Valley.

The concern of this subcommittee at the time was we did not think there should be any commitment to West Valley until you reached an understanding with the State of New York regarding the apportionment of costs and the responsibility for remedial action for certain portions of West Valley.

Where are you in reaching that agreement?

Mr. CUNNINGHAM. First of all I think we agree with you that we should not proceed without firm agreements. We cannot proceed with anything other than an environmental impact statement and supporting activities without specific legislation. That has to be worked out in concert with the Congress.

Mr. **Ward**. You do not intend that the initial $5 million is next year going to rise to $20 million to initiate action? You are just going to do these environmental impact statements?

Mr. **Cunningham**. We are going to do the project definition including all environmental impact statements. We have no funds in there to proceed with the work on site. If legislation is passed to proceed with a project, then additional funds will be needed.

Mr. **Ward**. You are asking for $15.8 million for spent fuel storage and $14.8 for operating expenses. Your language is virtually identical to the language in last year's budget request. You are going to do a lot of studies. It seems to me that either you did the studies with this year's money or you did not. If you spent the funds as designated, why do you need the money to do the same studies next year? Is there a termination point on these studies? Are you just going to keep putting this language in here until somebody says have you not done that?

Mr. **Cunningham**. I think I would agree with you that if we do not proceed with the program this year, we do not need money for any more studies next year.

Mr. **Ward**. That is interesting. The question was what are you going to do with the money here?

Mr. **Cunningham**. We are continuing the design and site specific evaluations under the assumption that the program is going to proceed.

Mr. **Ward**. Last year there was money in there and it said you were going to formulate contracts and establish business relations. We gave you money to do that. Are you rewriting the contracts? Why do you need money to continue that activity?

Mr. **Cunningham**. We have had no specific negotiations because we do not have legislation that permits us to do that.

Mr. **Ward**. You did not use the money for that purpose last year or under this present fiscal year?

Mr. **Cunningham**. Not for writing a specific contract.

Mr. **Ward**. What are you using the money for right now?

Mr. **Cunningham**. We are using the money for studies. We are using the money for conceptual design as we indicated last year. We are using the money for making some site evaluations of existing sites including different ways to store spent fuel.

We are not entering into contract negotiations.

Mr. **Ward**. It was one of the points. You list a number of things. Can you submit to the subcommittee a list of when all these studies are going to be completed?

Mr. **Cunningham**. Certainly.

[Testimony resumes on p. 715.]

[The following information was received for the record:]

Response to Subcommittee Request

A list of studies and their completion dates follows: It must be recognized that many of the studies like Spent Fuel Requirements are ongoing in order to maintain a current data base to support program planning and respond to questions from Congress. Others like those associated with environmental evaluations and licensing of facilities progress from a broad scale feasibility evaluation to the detailed designs and analyses necessary to assure safe licensable operations.

3/6/80

AFR SPENT FUEL STORAGE PROGRAM
STUDIES AND ANALYSES - PROGRAMMATIC AND R&D

FY 78

1. Programmatic
   - A. Domestic GEIS (Draft 8/78)
   - B. Foreign GEIS
   - C. Fee GEIS
   - D. AFR Facility Conceptual Design
   - E. AFR Facility Technical Data Summary
   - F. Analytical Methodology and Facility Description (DOE/ET-0054, 8/78)
   - G. AFR Site Analyses
     - 1. Archaeological Survey
     - 2. Geological Investigation (Preliminary Report 4/78)
     - 3. Ecological Inventory
   - H. Quality Assurance Program Development (Draft 9/78)
   - I. Spent Fuel Storage Requirements
     - 1. Utility AFR Requirements (Moss Questionnaire)
     - 2. Computer Code (Disful) Development
     - 3. Analysis of Pool Expansion Limits (Report 8/78)
     - 4. LWR Spent Fuel Storage Study (report 6/78)
   - J. International Efforts
     - 1. Assistance to Tarapur Power Reactor (Feasibility Report, FY 78)
     - 2. Spent LWR Fuel Shipments, Japan, Spain, Sweden, Switzerland (Report 12/77)

FY 78 (Continued)

K. Development of Fee for Storage and Disposal

  1. Sensitivity Studies (Report PNL-2637, 6/78)

  2. Preliminary Fee Estimates (DOE/ET-0055, 7/78)

L. Dose Rate Assessments

II. Research and Development

A. Critical Experiments to Support Close Proximity Water Storage of Spent Nuclear Fuel

B. Risk Analysis of a Spent Fuel Receiving and Storage Facility Using the GO Methodology (Report, FY 79)

C. Reactivity Monitoring Studies

D. Spent Fuel Storage Densification Studies (Phase I, VOLS I-X, 9/78)

E. Spent Fuel and Fuel Pool Equipment Integrity Studies (Annual Report)

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AFR SPENT FUEL STORAGE PROGRAM
STUDIES AND ANALYSES - PROGRAMMATIC AND R&D

FY 79

I. Programmatic

  A. Domestic GEIS (Draft Supplement, 12/78)

  B. Foreign GEIS (Draft, 12/78)

  C. Fee GEIS (Draft, 12/78)

  D. AFR Facility Conceptual Design (Report, 12/78)

  E. AFR Facility Technical Data Summary (Report, 11/78)

  F. AFR Site Analyses

    1. Archaeological Survey (Report, 12/78)

    2. Geological Investigation

    3. Ecological Inventory (Report, 1/79)

  G. Quality Assurance Program Development (Manual, 8/79)

  H. Spent Fuel Storage Requirements

    1. Spent Fuel Storage Requirements (DOE/ET-0075, 2/79)

    2. DISFUL Code Development (Report, 3/79)

    3. Utility Questionnaire, DISFUL updated (5/79)

    4. Full Core Reserve Study (Report, FY 80)

    5. Spent Fuel Shipping Analysis of US LWR, 70% and 80% Capacity Factors (Reports, 1/79)

  I. International Efforts

    1. Tarapur Spent Fuel Return Study (Draft, 9/79)

    2. Generic Plan for Foreign Fuel Return

    3. Emergency Plans for Foreign Fuel Return

AFR SPENT FUEL STORAGE PROGRAM
STUDIES AND ANALYSES - PROGRAMMATIC AND R&D

FY 79 (Continued)

4. Assistance to Tarapur Power Reactor (Summary Engineering, Report, 3/79)

5. Remote Island Storage Studies (Reports, 6/79, 9/79)

6. International Site Investigation

7. Non-US Spent Fuel Shipping and Disposition Studies (Reports, 10/78, 2/79)

8. Support for INFCE Working Group 6

J. Development of Fee for Storage and Disposal

1. Fee Payment Studies (Report PNL-2826, 1/79)

2. Technical, Legal, Regulatory Study of the Fee

K. Facility Studies

1. Review of Existing Government Facilities (Report, 9/79)

2. Alternatives for DOE Storage of Spent Fuel at Morris (Report, 4/79)

3. BNFP Studies

a. Safety and Environmental Impact of AFR Storage (Report, 1/79)

b. Strategy, Options, and Timing for AFR Storage at BNFP (Report, 3/79)

c. Operating Costs for AFR Storage at BNFP (Report, 9/79)

L. Transportation Studies

1. Sandia Transportation Technology Center (TTC)

2. Operational Assessments of Shipping Casks (Report, 10/78)

3/6/80

AFR SPENT FUEL STORAGE PROGRAM
STUDIES AND ANALYSES - PROGRAMMATIC AND R&D

FY 79 (Continued)

- M. Environmental Assessment for Acquiring AFR Capacity (RPA)
- N. Energy Systems Acquisition Project Plan, ESAPP (5/79)
- O. Economic Studies (Reports in FY 80)
  - 1. AT Reactor vs. AFR Economic Analysis
  - 2. Reactor Basin Sizing Studies
  - 3. Spent Fuel Storage Capacity in New Reactors
- P. Development of Model Contract for Utility-DOE (Report in FY 80)
- Q. Risk Assessment of Spent Fuel Storage Program (Report, 9/79)
- R. Study of Institutional Mechanisms at the State Level (FY 80 Report)

II. Research and Development

- A. Critical Experiments to Support Close Proximity Water Storage of Spent Nuclear Fuel (7/79)
- B. Risk Analysis of Spent Fuel Receiving and Storage Facility Using the GO Methodology (Report, 3/79)
- C. Design of Reactivity Monitoring System (FY 80 Report)
- D. Failed Fuel Detection Studies (FY 80 Report)
- E. Laser Studies for Failed Fuel Detection
- F. Spent Fuel Storage Densification Studies (Phase II, Report Vols 1-5, 9/79)
- G. Safeguards - Physical Security, Containment, and Surveillance
- H. Safeguards - Materials Accountability Instrumentation Development
- I. Spent Fuel and Fuel Pool Equipment Integrity Studies (Annual Report)

AFR SPENT FUEL STORAGE PROGRAM
STUDIES AND ANALYSES - PROGRAMMATIC AND R&D

FY 80

I. Programmatic

A. Planning and Management

1. AFR Program Plan (DOE/SR-SF-2006, 3/80)

2. Business Services Department

a. Business Plan (Scheduled 4/80)

b. Facility Value Economic Criteria Reports (Scheduled 4/80
8/80)

c. Full Core Reserve Study (Report, 11/79)

4. Storage Requirements

a. Update of DOE/ET-0075 - Spent Fuel Storage Requirements (DOE/NE-0002, 2/80)

b. Utility Questionnaire (Scheduled 5/80)

5. Economic Studies

a. Spent Fuel Storage Capacity in New Reactors (DOE/SR-SF-
2003, 12/79)

b. Spent LWR Fuel Storage Costs - Reracking, At Reactor Basins, and AFR Basins (DOE/SR-SF-2002, 1/80)

c. Reracking to Increase Spent Fuel Storage Capacity (DOE/SR-SF-2004, 2/80)

6. Spent Fuel Storage and Disposal Fee

a. Update of DOE/ET-0055 Preliminary Estimates of Charge f
Spent Fuel Storage and Disposal Services (Scheduled FY 80)

b. Fee Collection Mechanisms - Methodology (Scheduled FY 8

c. Discount Rate Analyses (Reports Scheduled 4/80, 8/80)

FY 80 (Continued)

7. Draft Contract - Spent Fuel Storage and Disposal Between DOE and Fuel Owner (Report, 11/79)

8. Public and Governmental Relations

    a. Assessment of Public, Utility, and General Public Perspectives of the AFR Program (Report, 1/80)

    b. Study of Institutional Mechanisms at the State Level (Report, 12/80)

B. Facilities

1. Evaluation Studies at GE-Morris (Reports FY 80)

2. Evaluation Studies at BNFP (Reports FY 80)

3. Evaluation Studies at NFS-West Valley (Reports FY 80)

C. Legislative Requirements

1. NEPA Activities

    a. Final Draft EIS, Spent Fuel Policy, Vols. 1-5 (DOE/EIS-0015, 1/80)

    b. Final EIS (DOE/EIS-0015), Scheduled 4/80

    c. Public Hearings - Schedule FY 80-81

2. Short Term EIS (Draft, FY 80)

3. Congressional Reports

    a. Site Report (4/80)

    b. Fee Report (Scheduled 8/80)

    c. Final Report (FY 81)

FY 80 (Continued)

D. Technical Studies

1. GE-Morris Operating Costs for AFR Storage (Report, 12/79)

2. GE-Morris Radiation Source Characteristics (Draft Report, 11/79)

3. Dry Storage Concepts (Interim Report FY 80)

4. Site Selection Methodology (Interim Report FY 80)

E. Transportation Effort

1. Industry Survey Report (Report, 1/80)

2. Institutional Issues Report (Scheduled 9/80)

3. Transportation Systems Design Description (Scheduled 5/80)

4. Intermodal Transport Interim Report (Scheduled 9/80)

5. Cask Handling Options (Report Scheduled 8/80)

6. Contingency Plan for Reactor to AFR Transport (Report Scheduled 9/80)

F. International Effort

1. International Activities Program Plan (4/80)

2. Initial Contingency Plan for Foreign Fuel Return (Scheduled 3/80)

3. Emergency Feasibility Report (Scheduled 7/80)

4. Emergency Transfer Report (Scheduled 9/80)

5. Technology Transfer/Information Exchange Plan (Scheduled 5/80)

II. Research and Development

A. Critical Experiments to Support Close Proximity Water Storage of Spent Nuclear Fuel (Annual Report)

B. Criticality Analysis (Report 5/80)

FY 80 (Continued)

- **C. Fuel Integrity Studies**
  - **1. International Survey Report (3/80)**
  - **2. Corrosion Report (Scheduled 9/80)**
- **D. Disassembly and Fuel Rod Storage**
  - **1. Underwater Disassembly**
    - **a. Safety Evaluation (Report Scheduled FY 80)**
    - **b. Prototype Design (Report Scheduled FY 80)**
    - **c. Environmental Evaluation (Report Scheduled FY 80)**
- **E. Fuel Clad Failure Detection (Report DOE-ET-47906-1, 11/79)**
- **F. Laser Based Failure Detection (Feasibility Report, FY 80)**
- **G. Reactivity Monitoring Design (Report Scheduled 9/80)**
- **H. Dry Storage Concepts (Evaluation Report Scheduled 8/80)**
- **I. Safeguards - Physical Protection**
  - **a. Sabotage Testing (Annual Report, 9/80)**
  - **b. Prototype Equipment Development (Annual Report, 9/80)**
- **J. Safeguards - Materials Accountability**
  - **a. System Development (Annual Report, 9/80)**
- **K. Passive Emergency Cooling Study**
  - a. [illegible]

II. [illegible]

- A. [illegible]
- B. [illegible]

AFR SPENT FUEL STORAGE PROGRAM
STUDIES AND ANALYSES - PROGRAMMATIC AND R&D

3/6/80

FY 81

I. Programmatic

A. Planning and Management

1. AFR Program Plan (DOE/SR-SF-2006) (10/80, 3/81)
2. Facility Evaluation Report (4/81)
3. Update Storage Requirements Report, DOE/NE-0002 (1/81)
4. AT Reactor Storage Evaluation (6/81)
5. Facility Licensing Management Report (4/81)
6. Update of Storage and Disposal Fee
7. Develop Final Contract - Storage & Disposal Services (12/80)
8. Final Approved Quality Assurance Plan
9. Public and Governmental Relations
    - a. Barriers to Radioactive Materials Transportation (Report 1/81)
    - b. Transportation Accident Response Plan Report (9/81)

B. Facilities

1. GE-Morris Pre-License Activities (Reports)
2. GE-Morris Implementation Activities (Reports)
3. AGNS Pre-License Activities (Reports)
4. AGNS Implementation Activities (Reports)
5. NFS Evaluation Studies (Reports)
6. NFS Pre-Licensing Activities (Reports)
7. NFS Implementation Activities (Reports)

NT FUEL STORAGE PROGRAM 3/6/80
ES AND ANALYSES - PROGRAMMATIC AND R&D

FY 81 (Continued)

C. Legislative Requirements

  1. NEPA Activities

    a. Near Term EIS (4/81)

    b. Long Term EIS, Start FY 81

  2. Congressional Activities

    a. Final Congressional Report (6/81)

D. Technical Studies

  1. Dry Storage Conceptual Design Report (9/81)

  2. Occupational Dose Assessment Reports (10/80, 9/81)

  3. Decontamination and Decommissioning Studies (Final Report 9/81)

  4. Site Selection Methodology Studies (Final Report 2/81)

  5. Evaluations of Potential AFR Sites, Site Bank (Reports throughout FY 81)

E. Transportation

  1. Industry Survey Report

  2. Institutions Issues Final Report (FY 81)

  3. Systems Design Descriptions

  4. System Safety Evaluation

    a. Response Evaluation (10/81)

  5. Intermodal Transport

  6. Carrier Workshops Transcript (2/81)

  7. International Transport

    a. Preliminary Report (11/80)

    b. Final Report (2/81)

FY 81 (Continued)

F. International Program Studies
   1. Contingency Studies
   2. Emergency Feasibility Studies
   3. Multinational Storage Studies
   4. Technology Transfer Seminars
   5. Program Plan
   6. Support Studies

II. Research and Development
   A. Criticality Analysis (Final Report 5/81)
   B. Passive Emergency Cooling (Report 4/81)
   C. Fuel Integrity Studies (Annual Report)
   D. Disassembly and Rod Storage
      1. Underwater Disassembly
         a. Economic Evaluation Report (1/81)
         b. Final Report (3/81)
      2. Dry Disassembly
         a. Demonstration Report (6/81)
         b. Final Report on Cold Demonstration (9/81)
      3. Critical Experiments to Support Close Proximity Water Storage (Report 9/81)
   E. Laser Based Failure Detection, Feasibility Report (5/81)
   F. Cask Storage, Initial Report
   G. Dry Storage Studies (Reports)
   H. Safeguards
      1. Integrated Control and Safeguards System Report (8/81)
      2. Non-Destructive Assay System Design (10/80)
   I. Generic Studies
      1. Benchmark Shielding
      2. Waste Minimization

Mr. **Ward**. Next year at this time we will not fund them again or at least we will have some idea of when they will be terminated.

You have requested money for the State planning council. One of your descriptions of what the money is going to be for is there are going to be grants to the States for independent assessments. Who is going to be dispensing those grants?

Mr. **Cunningham**. The Department of Energy will deal directly with the States.

Mr. **Ward**. They will not be dispensed by the planning council?

Mr. **Cunningham**. No.

Mr. **Ward**. What criteria are you going to use?

Mr. **Cunningham**. The criteria we will be using is on the basis of need to participate with us in the program in that State. By that I mean obviously if you have a large site evaluation study going on in a State and a State needs more funds, it needs more active participation in the program. If you are simply doing a small paper study or something of that sort then less funds would be required by the State.

Mr. **Ward**. Are there any controls placed upon the State's use of those funds?

Mr. **Cunningham**. Yes.

Mr. **Ward**. Where are they?

Mr. **Cunningham**. The controls are part of the actual grant in terms of how the funds are allocated to the State.

Mr. **Ward**. You are in the process of developing those controls?

Mr. **Cunningham**. I think we have an example of how it works by looking at what has been done with funds for the State of New Mexico on the WIPP project.

Mr. **Ward**. Using New Mexico as an example of how you are going to proceed?

Mr. **Cunningham**. Using New Mexico as an example of what these funds are used for and how they are useful.

Mr. **Ward**. You have money in there for $2 million for supporting studies and evaluations. Some of this $2 million is going to be used for an analysis of public attitudes and issues. Why are you doing opinion polls?

Mr. **Cunningham**. These are more what I would call collection of information in the sense that we are trying to determine what the concerns of the public are so we can address those concerns. We are trying to determine what their attitudes are with regard to different types of waste material.

Mr. **Meyers**. These are public meetings and workshops. The Agency in the past has been accused of being insensitive to the needs of the States and the citizens where we intend to do work. This is an attempt on our part to get out up front and meet with the people through public meetings and workshops to find out what their real concerns are and what we can do about alleviating those concerns.

They are not public opinion polls. That is perhaps a bad choice of words to appear in the budget statement.

Mr. **Corcoran**. Mr. Chairman, would Mr. Ward yield on that point?

Mr. **Ward**. Yes.

Mr. CORCORAN. It was my earlier understanding that the State planning council was in this whole process going to be something rather separated from the Department of Energy. As I understand and unless I missed a point what we are talking about is the funding for the State planning council. Is that correct?

Mr. CUNNINGHAM. No. Perhaps that is where part of the confusion is coming from. We have lumped a number of funding requirements together under this one category. Funding in support of the State planning council is one of those. Funding in support of technical support and grants of States involved in the nuclear waste program is another category under there. A third category which is a relatively small percentage of the effort we are mentioning is one in which we will hold these public meetings and try to determine the public concerns and be responsive to their needs and concerns.

Mr. CORCORAN. The "we" in this case is the Department of Energy?

Mr. CUNNINGHAM. Yes.

Mr. MARKEY. The Chair recognizes minority counsel, Mr. Bienstock.

Mr. BIENSTOCK. Thank you, Mr. Chairman.

Mr. Cunningham, earlier we were discussing the potential cost of the away from reactor storage facilities. Aren't those costs to be assessed on a full-cost recovery basis? That is, not a cost to the Federal Government but rather a cost that will be picked up by the utilities and the ratepayers?

Mr. CUNNINGHAM. It has been our intent for full cost recovery.

Mr. BIENSTOCK. Can you tell me what the status of the low-level waste burial ground site selection is?

Mr. CUNNINGHAM. The low-level waste burial policy which we are encouraging, which was also discussed in the President's statement, would encourage the development and utilization of regional low-level waste centers. By regional, we mean each State could have one if they wanted but there needs to be at least regional sites or sites capable of taking care of regional needs.

While we have considered contingency approaches or requirements for the Federal Government to step in and do something if required, basically the policy as proposed by the President is to encourage the States on a regional basis to take care of their own needs and to provide support to the States in working these processes out.

We have been encouraged to date that States are actively proceeding along the lines of trying to work out regional solutions to the waste management problem.

Mr. BIENSTOCK. Last fall we had a situation where our three remaining burial grounds for low-level wastes either terminated completely or restricted severely the intake of low-level waste from our nuclear medical facilities or hospitals, cancer treatment facilities, et cetera.

Mr. CUNNINGHAM. That is correct.

Mr. BIENSTOCK. Would that not signal that perhaps it is necessary for a Federal role in selecting sites?

Mr. CUNNINGHAM. As I say it is possible that we could end up with that requirement. I think that is a contingency that the Federal Government has to take into account. Our preferred way is to work with the States and encourage them to seek a regional solution and I think again some progress is being made there.

Mr. **Bienstock**. On what timetable?

Mr. **Cunningham**. Is there anything on the timetable?

Mr. **Meyers**. There is no timetable. Dr. Cunningham mentioned that it is the Department's preferred approach. It is also the preferred approach of a number of State Governors. The Governor of the State of Washington, Governor Ray, and Governor Riley of South Carolina, both felt strongly that while this is a nationwide problem it ought to be treated by the States as opposed to the heavy hand of the Federal Government.

We have no Federal schedule. Governor Riley has said that over the next 2 years he is cutting back on the intake of the Barnwell facility in South Carolina from 2.4 million cubic feet a year to 1.2 million cubic feet. Governor Ray has recently announced that come 1982, out-of-State low-level waste will not be received at the Hanford site.

What they are both saying is that over these 2 years they will be watching the other States to see if they do indeed start moving in the direction of opening up low-level sites. My estimate is that if other States do and they are, Governors Ray and Riley will keep their sites open. If there appears to be no motion I think we will get a strong signal that they intend to do something rather drastic with those sites and that might indeed require a Federal program.

Mr. **Bienstock**. What you are saying is that you are drawing a distinction between the low-level waste program which we will leave to the States and the high-level waste program which the Federal Government will coordinate?

Mr. **Meyers**. It is more than a coordination. By law the Federal Government has no role now in the low-level waste program. That is a commercial operation essentially licensed by a regulatory agency. We have a legal responsibility under the Energy Reorganization Act of 1974 to provide for high-level waste disposal.

Mr. **Bienstock**. Will the States be given a veto over that high-level waste disposal site?

Mr. **Cunningham**. I think as we have said we are trying to avoid any confrontation of a veto type. We have said we intend to coordinate our efforts with the State. We intend to seek their concurrence as we go through a step-by-step process.

The distinction we are making between the word "concurrence" and "veto" is, "concurrence" implies working with us and assumes people will make honest efforts to reach solutions to problems as they arise.

We are very hopeful that we will be able to avoid a veto confrontation situation. It is necessary that we work with the States and I think it is necessary that we do this in a straightforward manner.

Mr. **Bienstock**. I recall a year ago we had a similar discussion, not with you, but with your predecessor on this very issue. After 45 minutes of discussion between himself and the chairman of the subcommittee, I was still left in doubt as to the difference between "veto" and "consultation and concurrence."

Mr. **Cunningham**. Let me clarify and not being a lawyer I hate to clarify from a legal standpoint but nevertheless from a legal standpoint I really do not think we have authority to grant veto rights. On the other hand at the same time we are also trying to say we would not like to use the heavyhanded approach of the Federal Government and simply impose something on unwilling recipients.

For that reason we talk about the concurrence procedure and we talk about the process of working with the States because we believe through the use of the mechanism of providing grants so they have their own expertise to evaluate our work and to consult with us and to determine whether we are taking the right approaches or not that we can work together. I think we are also finding that as the awareness of the problems becomes greater the State governments are willing to recognize that it is a national problem. It is not a State problem. They are willing to recognize that geologic media occur where nature has placed them and not where we would like to select them on a Federal reservation or something of that sort.

I think if we go through the process correctly that the veto issue itself will never occur. I think there are valid reasons in some cases why States may not want us to locate a site there. I think if those reasons are correctly presented that we will probably agree with them.

On the other hand I think there are valid reasons for the Federal Government to want to locate in specific States. I believe given proper attention to the matter that we can get agreement from the States if that is the correct approach.

Mr. BIENSTOCK. I wish I could share your optimism. I do not. I believe that the back end of the fuel cycle is the key to the continuation of nuclear power as a viable option for our energy future and I think as I have been told in the past by members of the Department of Energy that consultation and concurrence means that if there is no concurrence, there is no site. That sounds like a veto to me.

Thank you, Mr. Chairman.

Mr. MARKEY. The Chair recognizes Mr. Ward.

Mr. WARD. You have changed the focus and transferred a lot of the Carlsbad site and a few other sites into the civilian waste program and out of the defense area. It is not clear to me if you have increased Carlsbad funding under commercial waste by $34 million or something.

Mr. CUNNINGHAM. It is $21 million.

Mr. WARD. You have increased the basalt program by $2 million. You have increased the Nevada sites by around $2 million and Seabed. I am not clear what you are seeking to accomplish by that.

Are you saying you are using this money to do geologic characterizations of the sites or are you into a site selection process?

I understand there is an overlap and it is not a clear distinction. How would you characterize what you are doing there with these funds?

Mr. CUNNINGHAM. Let me see if I can explain it this way; in the past our approach was to take that geologic media which we know most about which is salt and to proceed as rapidly as possible into the selection of a specific salt site which in this case was WIPP and use that site first of all as an experimental repository and with the later potential of making it a permanent repository.

At the same time we were saying that in sequence and at later dates we would characterize other geologic media such as granite, basalt, and the others, and when we had sufficient data we would then consider the selection of a site in those geologic media.

What the President's statement has said is that the approach should be changed so that rather than make a site selection in salt that we should expand the geologic investigation and we should try our best to bring our level of knowledge in granite and basalt and the other promising media up to the same level as salt so that when we make a final site selection it will not be one of just which is the best salt site but which is the most attractive site regardless of the geologic media.

In doing this then the administration decided it was proper, rather than to proceed with construction of the WIPP facility to continue to consider that site as a potentially suitable site in salt but at the same time to not proceed with construction there or not to make a final site selection until we had data on the other materials.

Mr. **Ward**. How much of it is R. & D.?

Mr. **Cunningham**. It is a difficult question to answer because the problem we have with site characterization is there is a continuing controversy and this is one of the things mentioned earlier with regard to NRC criteria for site selection, is the continuing controversy as to how necessary it is to make the evaluations on the basis of what you see on the surface and what you measure on the surface such as hydrology and what you get from simple core drillings; this kind of information compared to actually sinking a fairly large shaft, going underground and doing site specific tests in that location underground.

I cannot tell you the exact answer as to what would be required for site characterization. If we proceed along those lines I would consider most of the money R. & D. because it is the type of work that you have to do in order to get the type of information you need for site selection.

On the other hand I think it is reasonable to argue that some of that might be considered as site specific work and not R. & D. It is a question that we have not settled and it was not settled in the interagency review group.

Mr. **Ward**. How much of your spent fuel money is R. & D.?

Mr. **Cunningham**. About half.

Mr. **Ward**. Thank you, Mr. Chairman.

Mr. **Markey**. I want to thank you very much for your appearance today. We will be having a series of hearings on this subject and others as the months go by trying to evolve a commonsense long-term program to be able to deal with this very serious societal problem.

We thank you. We will be seeing you in the coming months. The hearing is adjourned.

[Whereupon, at 4:40 p.m., the hearing was adjourned, to reconvene at the call of the Chair.]

FISCAL YEAR 1981 AUTHORIZATION FOR THE DEPARTMENT OF ENERGY AND THE FEDERAL ENERGY REGULATORY COMMISSION

FRIDAY, FEBRUARY 29, 1980

House of Representatives,
Subcommittee on Energy and Power,
Committee on Interstate and Foreign Commerce,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10 a.m., in room 2123, Rayburn House Office Building, Hon. John D. Dingell, chairman, presiding.

Mr. Dingell. The subcommittee will come to order.

Today, the subcommittee will hold another of a series of hearings on the Department of Energy on the subject of contracting by that agency. The subcommittee is concerned about the state of affairs with regard to this matter.

Investigations by the subcommittee staff, the General Accounting Office, and the Inspector General of the Department of Energy bring the subcommittee to the conclusion that there is a strong possibility that the contracting by the Department of Energy is either out of control or in serious disarray.

The Department of Energy contracting is running at a rate of over 5,000 contracts totaling $8.5 billion in fiscal year 1978. That figure has grown to $11 billion in 1980. The Department of Energy is the largest civilian procurement agency in the Federal Government.

Information reaching the subcommittee has indicated to us that there is a serious question whether many of these contracting activities need to be done at all. Another question relating to these contracting activities is whether there is proper supervision or whether there is duplication, or whether the binding of the Federal Government by DOE is being properly done.

Although the contracting officer has theoretical responsibility to challenge the decision to contract out rather than doing the work in-house, it appears that little or no effective challenge is being done by the contracting officer or indeed by anyone else at the Department of Energy. This regrettably suggests that the Congress may have been too generous in the past appropriating funds without adequate assurance that the money is really needed or that it will be spent wisely, or that its expenditure will be properly and adequately supervised.

Once the contract is awarded, the DOE contract office delegates responsibility for monitoring the contract to the program offices and the Defense Contract Administration Services—DCAS. It appears from our staff review that DCAS does not receive adequate information from DOE to measure technical progress, and it appears that there is a substantial problem in timeliness on this matter.

Based upon information supplied by DOE officials, it is hard to understand how DCAS can do much more than a simple arithmetic check of the vouchers before approving payments. There are few, if any, challenges of performance under these contracts by any office of DOE.

Numerous DOE Inspector General reports indicate that this entire process is entirely inadequate from the original justification through contract requirements.

Not only is DOE contracting out basic policy and management functions of the department, but they are wasting huge amounts of resources on R. & D. projects, which oftentimes are of doubtful value and which appear to severely limit the Nation's ability to bring on new technologies or to fund more promising undertakings.

For example, in a recent Inspector General investigation, it was found out that DOE handed out more than $12 million for research projects, despite written evaluation from scientists and DOE staffers ridiculing the proposals and calling for their rejections. Certainly this is bizarre and ill-conceived handling of public funds.

In another example, both the Inspector General and the GAO investigation of the Fort Hood project found after 4 years and over $5 million of expenditure, there was nothing to show for the Government's efforts.

The General Accounting Office has found in areas it has examined, the DOE is lacking basic program plans for detailing how they are going to develop these technologies. Again, it appears DOE is shoveling the money out the door with no real return to the taxpayer or any contribution to the Nation, or it is simply throwing money at problems in the hopes that something will turn up.

Although the Government policy allegedly prohibits contracting out to circumvent personnel ceilings and to avoid salary ceilings, the DOE not only admits but proclaims that they do both in a response to the General Accounting Office.

Now, I have no bias one way or another regarding contracting out of nongovernmental functions other than to make sure that essential work and only essential work is performed at the lowest cost. However, throughout the current investigation, as well as previous staff investigations of the strategic petroleum reserve, DOE has never produced cost comparisons showing that their rampant contracting out is less expensive than doing it in-house. As a matter of fact, other committees of Congress with whom our staff has cooperated has found that DOE, far from abiding by Government policy not to contract out to avoid salary ceilings has contracted out for that express purpose.

For example, DOE justified contracting-out studies of U.S. energy tax policies on the basis that they can pay salaries in excess of Government ceilings. DOE apparently ignored the fact that other agencies of the Government, specifically the Treasury and Congress, employ many renowned tax experts within Government pay ceilings.

As a matter of fact, this has been so absurd that a former FEA official was given a subcontract without competition calling for a daily stipend of over $985 per day. Not only do salaries for contract officials performing routine Government functions appear to be exorbitant, but also they are increasing faster than the rate of inflation. A recent Inspector General investigation found contractors' salaries growing at a pace of up to 106 percent over a 3-year period through June 1979. The Inspector General reports numerous examples of the so-called "beltway bandit" or "flesh peddlers" and "body shops" paying themselves salary levels as high as $92,700 a year. That is about $30,000 higher than the salary of the Secretary.

An internal DOE document obtained by my staff indicates over $125 million was obligated for payment to contractors before contracts were in existence. I challenge whether that is a legal practice. And we will look for testimony and information as to the validity of that practice.

A sizable portion of this $125 million was obligated by DOE employees with absolutely no authority to do so.

These are so-called informal commitments. It is noted that DOE routinely ratifies these commitments. None have ever been denied. There have never been any controls laid in place, and the Chair observes that there has never been any discipline imposed with regard to the issuance of these commitments.

The DOE memorandum states, and I quote, "Repeated requests for ratification are symptomatic of weak business and programic controls."

The Chair observes that this is public money. And the Chair intends to inquire as to how public money is being spent in such a slovenly and slipshod fashion.

In response to my inquiry about this practice, the Chief Financial Officer, Mr. Hewitt, said in a February 26, 1980, letter, that DOE issued a new directive entitled: "Ratification of Unauthorized Contract Awards," ostensibly to curtail the practice I have been describing. But the directive fails to state that such commitments are illegal. In fact, Mr. Hewitt's letter defends this practice as a "well established procedure" for dealing "equitably" with contractors who perform in good faith.

The Chair wants everyone to know that the question of good faith of the contractor is not at issue. The behavior of DOE, the responsibilities of the supervisors to see to it that the law is carried out, the powers of the persons issuing these commitments, the supervision that they undergo, and a number of other questions merit a great deal of careful concern and consideration which appears to be very much lacking inside the agency.

It is also stated by the Department that appropriate disciplinary action will be taken against irresponsible DOE officials. The Chair has no evidence of any—I repeat—the Chair has no evidence of any disciplinary action having been taken with regard to the behavior of DOE officials, either those who issue these practices or those who tolerate their continuance. And the Chair will inquire as to what policies the Department proposes to lay in place to correct this abuse.

It is not the wish of the Chair or the committee to punish contractors who act in good faith or to discipline employees where the DOE policies and directives condone such practices. But the Chair does feel this practice has to have its legality established, and, as of this minute, I have grave doubts that this can be done.

As a matter of fact, I want this illegal practice stopped. The Chair will be taking two actions toward this end. I will first request the GAO to examine the practice in depth and to provide a legal opinion concerning it. The Chair will next offer an amendment to the DOE authorization bill prohibiting the practice except where the Secretary personally approves a commitment after notice to the appropriate committees of the Congress.

The Chair also wants to note a continuing GAO and committee presence will be maintained to ascertain what corrective steps are taken.

The Chair also wants DOE to know that we will inquire as to what corrective steps they propose to take and what enforcement measures they propose to carry forward to see to it that commitments made with regard to correction of these abuses are fully and faithfully and forcefully carried out.

I am equally disturbed about a January 15, 1980, GAO opinion that concludes, I must confess, albeit reluctantly, that the so-called quick reaction work orders are legal. I note that the DOE, according to the GAO opinion, contends if it is not allowed to use this anticompetitive contracting scheme, it will have to rely on sole-source procurements, task order contracts, and ratify informal commitments. I think this contention is patently absurd, and it appears to be somewhat insulting to this subcommittee.

Mr. Hewitt states that all such contracts support the work of the Economic Regulatory Administration and the Assistant Secretary for Conservation and Solar Energy, and he then states, and I quote:

> Both program areas have been responsible for rapidly implementary significant pieces of legislation, and are subject to frequent, urgent requests for analysis from the Congress, the President, and the Office of Management and Budget.

I expect Mr. Hewitt to provide to us, and I request at this time that he sees that we have within 2 weeks, detailed information identifying each time these two offices have used this contract procedure since it was initiated, and to identify when it was used to implement legislation, and when it was used to provide analysis to the President and the Congress or the Office of Management and Budget and to state why it was necessary to resort to this procedure. In other words, what was the justification for the action taken. [See p. 901.]

I am also going to request that the GAO reconsider its opinion in the light of today's hearings and further comments, which I will make to the GAO in the near future.

It is my belief that this kind of expenditure practice gives strong evidence that DOE perhaps has too much to spend; that it is not cost conscious; that it is poorly organized; that contract administration, both before and after awards, can best be referred to as a joke; and that it spends or seeks to spend contract money as a way to circumvent personnel ceilings and salary levels; and that it is too closely dependent on the contracts for information, technical assistance, analysis, policy impact, and other services.

DOE contracting, as I have observed, and as this statement indicates, is clearly out of control. This committee does not intend to tolerate that practice, and we intend to see to it that it is corrected.

The Chair observes we have three witnesses this morning who will all be invited to the table together to appear as a panel. First is the Honorable John A. Hewitt, Jr., Chief Financial Officer, Department of Energy. The second is Mr. J. Dexter Peach, Director, Energy and Minerals Division, U.S. General Accounting Office; and the third is Mr. A. Ernest Fitzgerald, Deputy for Productivity Management, U.S. Department of the Air Force.

We appreciate you all being present, and you have associates you wish to have present with you at the witness table, and the Chair observes that they will be entirely welcome.

We request you give us, if you please, your names for the purposes of identifying yourselves and your associates for the record and for the assistance of our reporter, and that you also identify those associates whom you have with you, starting on your left and my right, if you please, ma'am.

Ms. Eaton. I am Marilynn Eaton, Office of General Counsel, General Accounting Office.

Mr. Lightner. Kenneth Lightner, Jr., Energy and Minerals Division, General Accounting Office.

Mr. Peach. J. Dexter Peach, Director of the Energy and Minerals Division, General Accounting Office.

Mr. Fitzgerald. Ernest Fitzgerald, Deputy for Productivity Management in the Air Force, and on detail to the subcommittee.

Mr. Dingell. For which we are most appreciative.

Mr. Fitzgerald. Thank you.

Mr. Hewitt. Jack Hewitt, Chief Financial Officer of the Department of Energy.

Mr. Yohalem. Harry Yohalem, Deputy General Counsel for Legal Services of the Department of Energy.

Mr. Tashjian. Mike Tashjian, Director of Procurement and Contracts Management in the Department of Energy.

Mr. Dingell. Gentlemen, you are all welcome. We thank you for being with us.

The Chair advises our first witness will be Mr. Peach. You are recognized for your statement, Mr. Peach.

STATEMENTS OF J. DEXTER PEACH, DIRECTOR, ENERGY AND MINERALS DIVISION, GENERAL ACCOUNTING OFFICE, ACCOMPANIED BY KENNETH LIGHTNER, JR., ENERGY AND MINERALS DIVISION, AND MARILYNN EATON, OFFICE OF GENERAL COUNSEL; A. ERNEST FITZGERALD, DEPUTY FOR PRODUCTIVITY MANAGEMENT, DEPARTMENT OF THE AIR FORCE; AND JOHN A. HEWITT, JR., CHIEF FINANCIAL OFFICER, DEPARTMENT OF ENERGY, ACCOMPANIED BY MIKE TASHJIAN, DIRECTOR, PROCUREMENT AND CONTRACTS MANAGEMENT, JACK HOBBS, CONTROLLER, HARRY YOHALEM, DEPUTY GENERAL COUNSEL FOR LEGAL SERVICES, AND ELNORA ALTMAN, CHIEF, SMALL PURCHASE BRANCH

Mr. Peach. Thank you, Mr. Chairman. Before making my statement, let me say that Ms. Eaton, in the Office of General Counsel, was involved in the legal opinion that we furnished you with respect to quick reaction work orders, task order contracts, and Mr. Lightner was the team leader of our review of DOE procurement activities.

We are pleased to be here today to discuss the results of our examination.

This review was undertaken at your request, and on November 2, 1979, we issued our report, entitled "The Department of Energy's Practices for Awarding and Administering Contracts Need To Be Improved." We are furnishing a copy of that report for the record.

On January 14, 1980, the Department, at your request, formally replied to you on our report, and we are also furnishing for the record our evaluation of that response.

Mr. DINGELL. Without objection, those documents will be inserted in the record at the appropriate place. [See p. 738.]

Mr. PEACH. My statement today will briefly summarize the findings in our report.

DOE relies heavily on contractors to help carry out its mission. With reported obligations of $8.5 billion for about 5,000 contracts in fiscal year 1978, the Department is the largest civil procuring agency in the Federal Government. For fiscal year 1979 the Department reported obligations of about $9.2 billion for about 5,800 contracts, and it plans to procure more than $11 billion of goods and services during fiscal year 1980.

Our review of the contracting practices followed by five Department program offices indicated the following weaknesses: Contracting practices which avoid or limit competition; contractor involvement in the performance of basic management functions; and a need for more control over contract administration.

In carrying out its procurement activities, DOE was not offering maximum opportunity for competition. It reported that about 55 percent of its obligations susceptible to competition in fiscal year 1978 were awarded noncompetitively.

In addition, the Department's use of certain procedures—task order and quick-reaction work-order master contracts—worked to avoid or restrict competition.

DOE procurement regulations and Comptroller General opinions permit sole-source procurement in circumstances where only one source has exclusive capability to perform within the time required and at reasonable prices. DOE regulations require a written justification containing a statement of facts from which it can be concluded that the vendor is the only source of supply.

Of the 124 contracts we reviewed, 38 were awarded on a sole-source basis. All were justified, at least in part, on the basis that the contractor was the only one capable of doing the work. In our view, the justifications for 29 of these contracts did not adequately document that only one firm was competent and available to do the required work.

Mr. DINGELL. Mr. Peach, would you at the appropriate time submit to us the statement of each of those which you felt did not bear adequate documentation that only one firm was competent and available to do the required work?

Mr. PEACH. We will be glad to furnish that information for the record, Mr. Chairman.

Mr. DINGELL. It would be most helpful.

[The following information was received for the record:]

QUESTIONABLE SOLE SOURCE CONTRACT'S

Contract Number	Contractor
6359	Systems Control
6297	Systems Control
6352	Rhind & Smith
4014	Mitre
6203	Mitre
6202	Mitre
6450	R.L. Polk
6439	Analytic Sciences Corp.
6180	American Management Systems, Inc.
6370	American Management Systems, Inc.
6295	Donovan, Hemester & Rattein
3715	William K. Jones
6599	Analysis Group, Inc.
6185	Jack Faucett
6623	Jack Faucett
6548	Logistic Management Inst.
6291	Systems & Applied Sciences, Inc.
2292	American Management Systems
3003	Systems Consultant, Inc.
6458	Logistic Management
8599	Mathmetica
6300	Consumer Federation of America
10103	Coopers & Lybrand
6455	Consumer Federation of America
6259	Cexec
8683	National Regulatory Research Inst.
8575	Cexec, Inc.
8604	Logistic Management
6179	American Management Systems

Mr. **Peach.** While the Department may have made awards based on its best knowledge, our review indicated that, in some cases, competitors may have been available and that perhaps the program office did not aggressively seek other firms. The Department's January 14, 1980, letter to you, Mr. Chairman, acknowledged that the use of noncompetitive procurement requires constant surveillance and agreed to issue a departmental order emphasizing the importance of competition.

Mr. **Dingell.** Did you find such departmental order was in place prior to that time?

Mr. **Peach.** There were instructions that related to that area. This is a reinforcement of that kind of instruction and states it in much stronger terms.

Mr. **Dingell.** Have they at any time subsequent to that been implemented to your information?

Mr. **Peach.** Well, as I will get into later in my statement, Mr. Chairman, I think this is a kind of thing that requires constant oversight in order to make sure such orders are implemented adequately.

We continued to find, based on subsequent work, instances where, for example, quick-reaction work-order contracts were being let on a sole-source basis. So it is a kind of thing that will require constant followup and oversight to make sure that such instructions are implemented adequately.

Mr. **Dingell.** Could you identify to the committee, please, which of those informal commitments to contractors, without following the usual procedures for the award of contracts, you found?

Mr. **Peach.** We can also furnish that information for the record.

[The following information was received for the record:]

INFORMAL COMMITMENTS

	CONTRACT NUMBER	CONTRACTOR	AMOUNT OF COMMITMENT
1.	EL-77-C-01-8905	Turner, Mason & Solomon	$ 66,830
2.	EL-78-C-01-7148	Acres American, Inc.	14,886
3.	EV-78-C-01-6455	Consumer Federation of America	86,890
4.	EV-78-C-01-6354	Franklin Institute	8,624
5.	EF-77-C-01-2469	Minnesota Gas Company	809,712
6.	EX-76-C-01-2433	Institute for Gas Technology	416,000
7.	EK-77-C-01-2434	Institute for Gas Technology	8,900,000
8.	EF-77-C-01-2435	Institute for Gas Technology	2,100,000
9.	ET-78-C-01-3156	Foster-Miller Associates	52,951
10.	DE-FG01-79ET27003	University of Denver	54,250
11.	PR #79ET-13543.000	Engineering Science Co.	110,000
12.	EX-76-C-01-2270	Southern Company Services	1,500,000
13.	DE-AC01-79CS20508	Social Research Applications	223,744
14.	DE-AC01-79EV10141	Arnic Research Corporation	3,083,284
15.	PR #79AD-10677.000	Boeing Computer Services	160,000
16.	EL-78-C-01-7247	ICF, Inc.	94,499
17.	EM-78-C-01-4213	SBA (International Business Services)	53,000
18.	PR #79CS-32224.001 (Task Assignment)	ASHRAE	Unknown
19.	PR #79ET-21047	Mitre Corporation	635,000
20.	77-S-01-4012	Institute of Public Admin.	Unknown
21.	01-79ET-15079	Resource Planning Associates	Unknown

Mr. DINGELL. We will submit that also to the Department of Energy for their explanation. We thank you.

Mr. PEACH. Certainly.

We also found instances where program personnel made informal commitments to contractors without following the usual procedures for the award of contracts. Specifically, we found 21 commitments totaling over $18 million which were subsequently approved by contracting personnel. While the Department permits these commitments, its policy is to discourage their use. Such commitments weaken the DOE's overall control since they take place outside the usual procurement process.

Quick-reaction work-order master contracts and task order contracts both encompass broad, general areas of work. After competitively awarding such contracts, DOE issues work orders or task orders for specific projects. Of the 124 contracts we reviewed, 50 were quick-reaction work-order master contracts and 26 were task order contracts.

Quick-reaction work orders are intended for urgently needed projects valued at $250,000 or less which can be performed within 6 months and involve discrete end products. Once the master contracts have been awarded, the Department solicits proposals from no more than three master contractors. DOE agrees to place a minimum of $2,500 in work orders over a 3-year period for the contractor's standby capability.

A task order contract is a contract which establishes a relationship between the Government and a contractor for the purchase of a specific amount of time. The amount of time is usually stipulated in terms of direct staff days or hours. Task order contracts are usually awarded competitively with a general statement of work.

Specific duties or work to be performed are not included in the contract. After the contract has been awarded, the contractor is given orders which specify work to be performed. The contractor does not compete for these orders.

Mr. DINGELL. If that work is not done, the Government still has an obligation to pay; is that right?

Mr. PEACH. Yes; the Government would still have some obligation to pay. It would be a question of whether the work is adequately done and performed, and the completed product the Government wanted furnished. There would still be an obligation in this case.

Mr. DINGELL. Even if the work is inadequate, is not done or performed on time, is that correct?

Mr. PEACH. That is correct, Mr. Chairman; that is my understanding.

Mr. DINGELL. It hardly seems like a bargain.

Mr. PEACH. While we have concluded that both types of contracts can be used legally, we believe that the Department should modify its use of them in order to achieve a greater degree of competition. A copy of our letter to you, Mr. Chairman, expressing the pertinent legal opinion is included as an attachment.

Mr. DINGELL. Without objection, that will be inserted in the record at the appropriate place. [See p. 874.]

Mr. PEACH. Thank you.

DOE has stated that the quick reaction contracting reduces the number of noncompetitive awards. Our followon work has shown that out of the 37 work orders issued by 1 of the 5 organizations, at least 12 were sole-source awards. Since all quick-reaction work-order master contractors have been evaluated by the Department and found qualified in their general areas of work, sole-source awards should rarely occur in this type of contracting.

Mr. Chairman, I must amend my statement to say never, because it is hard for me to envision the kind of circumstances where you have this kind of arrangement existing for quick reaction that you would have to go sole-source.

Also, while the Department requires that quick-reaction work orders are to be used only for urgently needed projects, eight work orders, in our judgment, did not adequately document an urgent situation.

In addition, we are concerned because once master contracts have been awarded, DOE does not issue additional solicitations or award additional contracts in the designated areas of work for 3 years. Deliberately and completely excluding potentially qualified offerors for this length of time is, in our view, unduly restrictive. We believe the Department should modify its procedures accordingly. We also see no reason for the Department's decision to limit the number of contractors solicited for each work order to three.

With regard to task order contracts, we believe the broad statements of work can make meaningful competition difficult and may not insure that the Department obtains the lowest possible price. We believe the Department should more clearly define projects to be performed under task order contracts and should avoid using them whenever possible.

When using contractors, care must be taken to assure that contractor support activities do not supplant normal management functions. Both the Office of Management and Budget and DOE recognize the potentially damaging effects of having private enterprise perform basic management functions for the Government. To mitigate these negative effects, OMB issued directives, and DOE has published orders regulating the behavior of Government in its relationship with contractors.

Although DOE officials have stated that they do not intend to contract for the performance of basic management functions, they have awarded contracts which apparently require those functions. Some of these contracts allow contractors wide latitude for participating in the development of Federal energy policy and offer the potential for allowing the contractor to determine energy policy.

While the extent to which this is occurring throughout the Department can only be determined by a complete review of all DOE contracts, we found contracts in each of the five organizations we reviewed which in our view required the performance of basic management functions.

Based on our work, the practice of the Department's headquarters procurement office is not to question the scope of work and to rely exclusively on the program offices to determine needs and define the scope. Thus, the potential for contracts requiring the performance of basic management functions appears to exist throughout the Department.

While procurement directives and orders are quite clear that contracting for basic management functions is not permitted, we find no clear delineation between the performance of a basic management function for the Department and assisting the Department in the performance of such a function.

For example, it is often difficult to distinguish between a contractor participating in a policy decision made by DOE employees and a contractor actually making the policy decision for the Department.

Some DOE contracts are being structured so that there is only a general statement of a basic policy problem and little, if any, guidance from the program office as to what work the contractor is to perform and how it is to be performed.

Mr. DINGELL. Could you give us some examples of the last, please?

Mr. PEACH. We would be glad to furnish some for the record.

Mr. DINGELL. It would be a big help.

Mr. PEACH. We have some in our report we will be able to add to those, also.

Mr. DINGELL. Very good.

[The following information was received for the record:]

EXAMPLES OF DOE CONTRACTS WITH
GENERAL WORK STATEMENTS, WHICH
ALLOW THE CONTRACTOR TO
DETERMINE SCOPE AND/OR METHODOLOGY

1. On January 9, 1978, DOE issued a $363,157 task order (EM-78-C-01-5114) which was written so as to allow the contractor to perform the basic management functions of planning and development, and establishing goals and priorities. The contract specified only that the firm was to provide planning, economic, and technical analysis in the area of energy storage, including

   --determining the need for, and timing of, energy storage projects,

   --reviewing and updating energy storage plans,

   --Supporting the program office with quick response support on issues arising from congressional requests, budget information, congressional hearings, and other hearings and meetings.

2. On April 5, 1978, DOE entered into a $9,900 contract (EB-78-X-01-3715) to determine DOE's legal authority to control anti-competitive practices of common carrier pipelines. No specificity as to how this basic management function was to be performed was included in the contract. DOE officials told us that the study resulting from this contract is the basic source document for making petroleum pipeline regulation policy decisions.

3. On June 30, 1978, DOE signed a $87,000 contract to (1) identify DOE's responsibilities for dealing with energy emergencies, (2) design and develop an energy emergency planning process, (3) define a strategy for implementing an energy emergency-planning process, and (4) assist in the establishment of a strategy for distributing fuels in periods of short supply. DOE officials informed us that the contractor was selected, in part, because it is a firm which has sufficient credibility and reputation that senior Government officials would feel comfortable with its judgements. DOE did not provide any specific guidence to the contractor to direct the manner in which it made its "judgements."

Mr. **Peach**. Setting the parameters of the problem and devising solutions is being left to outside sources. We believe that this type of contract affords the contractor the opportunity for considerable input in policy determination and offers the potential for the contractor to actually determine energy policies for the Department.

As a related matter, the Department's Inspector General, in a December 13, 1979, report, confirmed our findings. The Inspector General found that "* * * many of the activities performed by consultants appeared to supplant policymaking and managerial functions that should be handled by DOE staff."

DOE's contracting officers have delegated most of their contract performance and cost monitoring responsibilities to the Department's program offices. As a result, the procurement office exercises far less control over contracts than it should to insure that the Government gets needed products at reasonable prices.

Additionally, because contracts have not been closed out in a timely manner, the Department does not know, for sure, that Government funds were properly expended for work performed.

Contracting officers, in discharging their duties, need the assistance of the Department's program offices. This is especially true where the data for evaluating progress and performance and for approving payments involve highly technical terms and complex subjects not entirely familiar to contracting officers. However, program officials at the Department's headquarters currently do far more than provide assistance to the contracting officers.

According to procurement officials, contracting officers delegate most technical and cost-monitoring activities to the program offices. However, they retain authority to approve contract changes requiring their signature and vouchers for the first and final contractor payments. Voucher approval during the contract period is delegated to program officials.

The Department's headquarters procurement office is currently delegating other contract administration functions to the Defense Contract Administration Services, an agency of the Department of Defense. According to the Department's procurement officials, contract administration functions are delegated because the procurement office lacks sufficient staff to carry out the functions internally.

Reliance on program personnel to review and approve contractor cost vouchers and provide interpretation of the contractor's performance does not provide for adequate separation of duties between the program personnel sponsoring the contract and the procurement office.

Under current Department of Energy practice, program personnel who initiate procurement requests are also responsible for contract monitoring. Since program personnel are mission oriented, it would appear that their primary interest must lie in accomplishing their mission, more so than carrying out contract administration responsibilities.

With respect to contract closeouts, DOE procurement regulations require that contracts be closed out in 3 months for purchase orders, 6 months for firm fixed-price contracts, and 20 months for all other contracts. A listing prepared by the headquarters procurement office showed more than 2,500 expired headquarters contracts which had not been closed out as of March 13, 1979. These contracts had a face value of over $3 billion.

Because these contracts were not closed out in a timely manner, the Department cannot assure that Government funds were properly expended for work performed. DOE procurement officials did not know the amount of funds withheld pending final closeout for these contracts or how much Government-owned equipment remained in the contractor's possession, although they stated it could be obtained from the Department Office of the Controller on a contract-by-contract basis.

Mr. DINGELL. Did you inquire of the Controller at that point?

Mr. PEACH. No, we didn't, Mr. Chairman. However, I would cite a report, not in that particular area of control over contracts, but a report of the Department's Inspector General, issued in December 1979: "Management of Government-Owned Property Held by Department of Energy Off-Site Contractors," in which he said that the Department did not have adequate control over Government-owned property, and he found a great deal of discrepancy between the Government records and the records of the contractor.

I think it specifies he found a great deal of Government-owned property the contractors had on their records, but not on the Government records.

Mr. DINGELL. Could you make a little inquiry on this particular point? I think it would be helpful for the record, and apparently you are the only folks around who are going to make this inquiry. It doesn't appear DOE is watching closely. It would be helpful to the committee, and we would then be able to say: "All right, fellows, it is time to straighten up this problem, too."

Mr. PEACH. We would be glad to work with your staff on that, Mr. Chairman.

Mr. DINGELL. You might also help us in good time with comments you might deem appropriate for correcting the defects in DOE regulations if such should be, or defects with regard to their implementation on the points you are raising in your excellent statement.

Mr. PEACH. Yes, Mr. Chairman.

DOE procurement officials have recognized that more timely contract closeouts are needed. All expired headquarters contracts are now being given to the Defense Contract Administration Services to be closed. This effort began in early 1979 and, according to DOE's January 14, 1980, response to our report, about 800 of the 2,500 expired contracts have been closed out.

All of the problems we noted have resulted from the DOE's failure to adhere to sound procurement practices. This lessens the Department's assurance that it is contracting for goods and services which are actually required and efficiently, effectively, and fairly obtaining an acceptable product at the best possible price.

We noted a general attitude that the Department's procurement system exists primarily to facilitate the work of the program offices. Although the procurement system of any Federal agency must operate as a service organization, it must also function as a guarantee that sound procurement practices are followed.

While these two roles are not completely compatible, a balance must be achieved which assures that program needs are met and sound procurement practices followed.

To correct weaknesses in the Department's contracting noted in our report, we recommended that the Secretary of Energy take action to insure that competition for Department contracts is maximized and that sole-source contracts, task order contracts, quick-reaction work-order master contracts, and contract ratifications are used only as exceptions to normal contracting practices. We also recommended that the Secretary establish specific guidelines to more explicitly delineate the types of management tasks which are and are not acceptable for contractors to perform.

To insure the Department's procurement office maintains effective control over awarded contracts, we recommended that the Secretary of Energy direct that contracting officers maintain administrative control over contracts in the areas of voucher approval and contract monitoring.

In regard to the need for adhering to sound procurement practices, we recommended that the Secretary of Energy establish a training program to reeducate procurement and program personnel in their respective procurement roles and responsibilities.

Mr. Chairman, I might emphasize this particular recommendation, because it is one that while it just talks in terms of a training program, is an attempt to get at this question of how you insure implementation of guidelines when you do put them out. And I think again that is a key issue here; the guidelines and directions can be improved, but the next question is the followthrough to make sure they are adequately implemented by both program and contracting personnel.

Mr. Dingell. When were these recommendations made?

Mr. Peach. They were made in our report which was released in November 1979.

Mr. Dingell. This was in the report to the committee which you made in November?

Mr. Peach. Yes.

Mr. Dingell. We will inquire of DOE, and we hope they will be very alert to tell us what a good job they have done about implementing those recommendations and will look at that with a great deal of interest.

You may proceed.

Mr. Peach. In addition, to insure that sound procurement practices are followed and will continue to be followed, we recommended that the Secretary of Energy direct that a Department-wide review be made of contracting policies and practices and require that these policies and practices be periodically monitored. As part of this effort, we pointed out that the Secretary should ask for the assistance of the Department's Office of the Inspector General.

Mr. Chairman, in your November 13, 1979, letter to GAO, you enclosed copies of your letters to DOE and the Defense Contract Administration Services concerning our report. Each agency was requested to provide a copy of its reply to your letters to GAO for review and comment to your subcommittee.

On January 14, 1980, DOE submitted its comments to you. In his letter, the Secretary of Energy expressed concern with a number of issues raised in the report and agreed to take corrective action.

We were somewhat perplexed, however, by the detailed comments which were attached to the Secretary's letter. There seems to be a dichotomy between the Secretary's letter and the attachment which contains statements disagreeing with many of our findings.

Mr. DINGELL. I think the correspondence referred to here is in the record. [See p. 761.] We will look for an explanation of the warfare that exists between the letter, itself, and the attachment thereto.

Mr. PEACH. Many of the comments contained in the attachment, in our view, did not address the issues raised in the report and are in direct conflict with information obtained during our work. We have evaluated these comments and, as indicated at the outset of my statement, are furnishing our evaluation for the record. [See p. 852.]

The Defense Contract Administration Services' comments, in a letter to you dated December 10, 1979, stated general agreement with our report as it related to areas bearing on Defense Contract Administration Services' involvement in the procurement activities and stated that they stand ready to assist and work with the Department in a joint effort to monitor and close out as expeditiously as possible the Department's remaining contracts which need to be closed.

Mr. DINGELL. Without objection, that document will be inserted in the record at the appropriate place. [See p. 887.]

Mr. PEACH. That concludes my statement, Mr. Chairman, and I and the members of my staff will be happy to answer any questions as we continue the hearing.

Mr. DINGELL. Mr. Peach, you have done a superb job on behalf of the subcommittee on this very difficult matter, and we wish to commend you and your associates. I hope you will express the commendation of the subcommittee to those working on this matter for you and for us.

Thank you.

Mr. PEACH. Thank you, Mr. Chairman.

[Testimony resumes on p. 891.]

[Attachments to Mr. Peach's prepared statement follow:]

REPORT BY THE

Comptroller General

OF THE UNITED STATES

The Department Of Energy's Practices For Awarding And Administering Contracts Need To Be Improved

The Department of Energy relies heavily on contractors to help carry out its mission. Its expenditures for goods and services during fiscal year 1978 amounted to about $8.5 billion.

GAO's review of the contracting practices which are used for five Department of Energy organizations indicate that there are weaknesses in the procurement system, including

- **--contracting practices which avoid or limit competition,**
- **--contractor involvement in the performance of basic management functions, and**
- **--a need for more control over contract administration.**

GAO recommends that the Secretary of Energy take action to correct the weaknesses noted in this report, enforce sound procurement practices, and review and periodically monitor the Department's procurement policies and practices.

This report responds to a request from the Chairman, Subcommittee on Energy and Power, House Committee on Interstate and Foreign Commerce.

UNITED STATES GENERAL ACCOUNTING OFFICE

EMD-80-2
NOVEMBER 2, 1979

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-178205

The Honorable John D. Dingell
Chairman, Subcommittee on
Energy and Power
Committee on Interstate and
Foreign Commerce
House of Representatives

Dear Mr. Chairman:

As requested on November 21, 1978, this report addresses selected aspects of the Department of Energy's procurement practices. Included are discussions of the Department's use of sole-source contracting, contracting for basic management functions, and contract administration.

At your request, we did not obtain agency comments on a draft of this report. The facts contained in this report were discussed with Department officials and changes were made where appropriate.

Unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of the report. At that time we will send copies to interested parties and make copies available to others upon request.

Sincerely yours,

Elmer B. Staats

Comptroller General
of the United States

COMPTROLLER GENERAL'S REPORT
TO THE CHAIRMAN, SUBCOMMITTEE
ON ENERGY AND POWER, HOUSE
COMMITTEE ON INTERSTATE AND
FOREIGN COMMERCE

THE DEPARTMENT OF ENERGY'S
PRACTICES FOR AWARDING AND
ADMINISTERING CONTRACTS
NEED TO BE IMPROVED

DIGEST

The Department of Energy awarded about 5,000 contracts totaling over $8.5 billion during fiscal year 1978, more than any other Federal agency. The Department's procurement system is not, in GAO's opinion, operating effectively and efficiently. The Department lacks assurance that it is contracting for goods and services which are actually required and that acceptable goods and services are obtained at the lowest possible price.

GAO's review of contracting practices which are used for five Department organizations disclosed (1) contracting practices which avoid or limit competition, (2) contractor involvement in the performance of basic management functions, and (3) need for more control over contract administration.

CONTRACTING PRACTICES WHICH AVOID OR LIMIT COMPETITION

Extensive use of sole-source contracts, task order contracts, and quick-reaction work-order master contracts avoid or limit competition. The Department reported that about 55 percent of all of its obligations susceptible to competition in fiscal year 1978 were awarded noncompetitively. Of the 124 contracts we examined, 38 were awarded on the basis of one firm's having exclusive capability. The justifications for 29 of these contracts did not adequately document that only one firm was competent and available to do the required work. Other firms claimed to have similar expertise and were interested in performing the work.

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Program officials have entered into informal commitments with contractors, which may be subsequently approved by a contracting officer. Such commitments weaken the Department's overall control over contract award since they take place outside the usual procurement process.

A task order contract is initially awarded to a single contractor; all tasks are later assigned to that contractor without competition. Quick-reaction work-order master contracts involve the selection of several contractors who are placed on retainer; proposals for work orders are subsequently solicited from at least three of the preselected contractors. Competition is, in all cases, limited to those firms initially awarded master contracts. (See pp. 3 to 8.)

CONTRACTOR INVOLVEMENT IN THE PERFORMANCE OF BASIC MANAGEMENT FUNCTIONS

Each of the five organizations within the Department of Energy appear to be contracting with private firms to carry out some of its basic management functions. These contracts are written so that the contractors are required to perform activities such as program planning and development and establishing goals and priorities. Some of these contracts also appear to provide contractors wide latitude for participating in the development of energy policy and offer the potential for allowing the contractor to determine energy policy.

For example, one contract was for a study to (1) identify the Department's responsibilities for dealing with energy emergencies, (2) design and develop an energy emergency-planning process, (3) define a strategy for implementing an energy emergency-planning process, and (4) assist in the establishment of a strategy for distributing fuels in periods of short supply. (See pp. 9 to 11.)

NEED FOR MORE CONTROL OVER DEPARTMENT CONTRACT ADMINISTRATION

Contracting officers, in discharging their duties, need the assistance of the program offices. Such assistance is especially important with respect to monitoring contracts where, for example, the data for evaluating progress and performance and for approving payments involve highly technical terms and complex subjects not entirely familiar to contracting officers. Department of Energy program officials, however, do far more than provide assistance to the contracting officers. Program personnel are actually performing some of the functions of the contracting officers. The Department's contracting officers are relying on program personnel to (1) review and approve contractor cost vouchers for payment and (2) monitor the technical progress of the contractor's work. The practice of delegating responsibility for these areas to program personnel weakens the Department's control over work performed by contractors. This is particularly important in view of the Department's heavy reliance on contractors to help carry out the Department's missions.

In addition, at the time of GAO's review, a backlog of over 2,500 expired contracts existed in the headquarters procurement office. The Department has taken steps to send all expired contracts to the Defense Contract Administration Services for closeout. Timely closeout of expired contracts is important to provide final assurance that Government funds were properly expended for work performed and to avoid claims by the contractor which may be difficult and costly to handle as time progresses. While the Department's action has reduced the workload for procurement personnel, GAO believes departmental responsibility for the contracts has not ended. Department contracting officers should monitor Defense Contract Administration Service progress on contract closeouts to ensure that further delays are not taking place. (See pp. 13 and 14.)

CONCLUSIONS

All of the problems noted have resulted from the Department's failure to adhere to sound procurement practices. This lessens the Department's assurance that it is (1) contracting for goods and services which are actually required and (2) efficiently, effectively, and fairly obtaining an acceptable product at the best possible price. GAO noted a general attitude that the Department's procurement system exists primarily to facilitate the work of the program offices. Although the procurement system of any Federal agency must operate as a service organization, it must also function as a guarantee that sound procurement practices are followed. While these two roles are not completely compatible, a balance must be achieved which assures that program needs are met and sound procurement practices followed.

Because the Department's procurement office appears to be stressing its role as a service organization at the expense of adhering to sound procurement practices, GAO believes the Department's personnel would benefit from undergoing a reeducation process. This "reeducation" should focus on the proper procurement roles and responsibilities of the Department's various activities and on the importance of adhering to sound procurement practices.

In addition, the Department's procurement activities should be monitored periodically to ensure that the problems noted in this report do not recur and that other procurement problems do not exist. The assistance of the Department's Office of the Inspector General may be beneficial as part of this periodic monitoring effort.

RECOMMENDATIONS TO THE SECRETARY OF ENERGY

To correct weaknesses in the Department's contracting which are noted in this report, the Secretary of Energy should direct the Department to:

--Take action to ensure that competition for Department contracts is maximized and that sole-source contracts, task order contracts, quick-reaction work-order master contracts, and contract ratifications are used only as exceptions to normal contracting practices.

--Establish specific guidelines to more explicitly delineate the types of management tasks which are and are not acceptable for contractors to perform.

To ensure the Department's procurement office maintains effective control over awarded contracts, GAO also recommends that the Secretary of Energy direct that contracting officers maintain administrative control over contracts in the areas of voucher approval and contract monitoring and maintain responsibility for contracts assigned to other Government agencies for closeout.

In regard to the need for adhering to sound procurement practices, GAO recommends that the Secretary of Energy establish a training program to reeducate procurement and program personnel in their respective procurement roles and responsibilities.

In addition, to ensure that sound procurement practices are followed and will continue to be followed, the Secretary of Energy should direct that a Department-wide review be made of contracting policies and practices and require that these policies and practices be periodically monitored. As part of this effort, the Secretary should ask for the assistance of the Department's Office of the Inspector General.

CHAPTER 1

INTRODUCTION

The Department of Energy (DOE) was established on October 1, 1977, by the Department of Energy Organization Act (Public Law 95-91). Among the many responsibilities which this act placed on DOE are (1) achieving effective management of energy functions; (2) carrying out the planning, coordination, support, and management of a balanced and comprehensive energy research and development program; and (3) developing and commercializing the use of solar, geothermal, and other renewable energy technologies. To help carry out these responsibilities, DOE uses contracts, cooperative agreements, interagency agreements, and grants.

With reported obligations of $8.5 billion for about 5,000 contracts in fiscal year 1978, DOE is the largest civil procuring agency in the Federal Government. DOE's contracting obligations represented 79 percent of its total fiscal year 1978 appropriations of $10.8 billion. With such a heavy reliance on contractors to help carry out its missions, an effective and efficient procurement function is essential to ensure that DOE obtains acceptable goods and services at the lowest prices.

On November 21, 1978, the Chairman, Subcommittee on Energy and Power, House Committee on Interstate and Foreign Commerce, expressed concern about a number of aspects of DOE's contracting practices and requested that we testify on such practices in February 1979. Subsequently, we were requested to review, in greater detail, contracting practices in five DOE program offices: Conservation and Solar Applications; Energy Information Administration; Economic Regulatory Administration; Policy and Evaluation; and Environment. As agreed to in discussions with the Chairman's office, our review was directed primarily to (1) support services contracts 1/ which avoid or limit competition, (2) support services contracts which call for the performance of basic managment functions which would more properly be performed by DOE personnel, and (3) contract administration. We previously reported on two additional concerns of the Chairman--DOE's efforts to encourage small business contracting, 2/ and DOE's policies and

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1/Support services contracts are contracts used to assist DOE in performing its mission and program tasks.

2/Letter report to Senator John A. Durkin (New Hampshire) on DOE's procedures for avoiding conflict of interest situations (EMD-79-85, July 26, 1979).

implementing procedures for avoiding contractor conflict-of-interest situations. 1/

As requested by the Chairman, a copy of this report was not forwarded to the agency for either formal or informal comments. The facts presented in the report, however, were discussed with DOE officials.

SCOPE OF REVIEW

Our review of DOE's procurement practices and procedures focused on the previously mentioned five DOE organizations and DOE's Procurement and Contracts Management Directorate. We also did some work at DOE's San Francisco and Nevada Operations Offices. We talked with procurement and program officials and reviewed pertinent procedures, orders, and regulations. DOE's automated procurement information systems could not produce a list of support services contracts. Therefore, from a broader list of contracts for the five DOE organizations, based on short work statements, we selected the contracts which appeared to be support services contracts. This resulted in our reviewing 124 contracts and the associated contract files.

1/Letter report to Congressman Thomas A. Luken (Ohio) on small business (EMD-79-83, June 2, 1979).

CHAPTER 2

CONTRACTING PRACTICES WHICH AVOID OR LIMIT COMPETITION

In 1959 the General Services Administration established the Federal Procurement Regulations which set forth detailed rules for civilian agencies to follow when purchasing supplies and services from commercial sources. These regulations reflect a congressional preference for procurement by formal advertising; however, procurement by negotiation is authorized under certain circumstances. Under either method, offering all qualified contractors the opportunity to compete helps to minimize the opportunities for favoritism or collusion, and provides greater assurance that acceptable supplies and services are obtained at the lowest prices. DOE has also issued regulations which further implement and supplement the Federal Procurement Regulations.

In carrying out its procurement activities, DOE does not appear to be offering maximum opportunity for competition. About 55 percent of all of DOE's obligations susceptible to competition in fiscal year 1978 were not awarded competitively. In addition, DOE is using certain procedures which either avoid or restrict competition--e.g., task order contracts and master contracts. GAO is currently reviewing the legality of DOE's use of quick-reaction work-order master contracts and task order contracting procedures.

SOLE-SOURCE CONTRACTING

DOE procurement regulations and Comptroller General opinions permit sole-source procurement in circumstances where only one source has exclusive capability to perform within the time required and at reasonable prices. The DOE procurement regulations further contain a detailed format, critical considerations and the review process to be used for approval of a sole-source procurement. These regulations require a written justification containing a statement of facts from which it has been concluded that the vendor is the only source of supply.

Of the 124 contracts which we reviewed, 38 were awarded on a sole-source basis. All were justified, at least in part, on the basis that the contractor was the only one capable of doing the work. We believe that the justifications for 29 of these 38 sole-source awards did not adequately document that only one firm was competent and available to do the required work.

In one case, a firm was awarded a sole-source contract on August 28, 1978, for $86,444. The purpose of the contract was to develop a detailed plan for preparation of alternative national motor vehicle registration files for a proposed standby gasoline rationing plan. Included in the statement of work were the following tasks:

--Development of procedures to process new and used car registrations during a rationing period.

--Development of procedures to improve the quality of vehicle registration files.

--Development of a plan to establish an updated and ready national motor vehicle registration.

The program office justified a sole-source award by stating that the firm was the only one with access to the required data base and the only one with experience in dealing with files and mailing lists. Subsequent developments, however, indicate this may not have been the case. After the contract was awarded, another firm submitted a Freedom of Information request to DOE asking to see the request for proposal. An official of that firm told us that both the firm which was awarded the contract and his firm have extensive experience in compiling and processing information and have access to the required data base. In subsequent discussions with DOE program office officials, they stated that they did not believe that the firm which was not selected could do the job as well as the selected contractor. This statement appears to contradict DOE's sole-source justification.

We found another instance where five firms other than the one designated as the only firm with expertise expressed an interest in the work and requested copies of the request for proposal. All were refused, although in subsequent discussions with DOE officials, they indicated that it is DOE's policy to send requests for proposals to all interested parties.

While DOE may have made these awards based on their best knowledge, these cases indicate that a competitor may have been available and that perhaps the program office did not aggressively seek other firms. We believe that to ensure that DOE receives the best product at the lowest price, every possible effort should be made to maximize competition for DOE contracts.

We also found instances where program personnel made informal commitments to contractors without following the usual procedures for the award of contracts. Specifically, we found

21 commitments totaling over $18 million which were subsequently approved by DOE headquarters contracting personnel.

DOE requires that certain procedures be followed before an informal commitment may be approved. The person responsible for making the informal commitment must submit a request containing a complete history of the action to the contracting officer. The contracting officer reviews the request to ensure that it is adequately documented and forwards it to the head of the procuring activity. The head of the procuring activity reviews the request, coordinates with counsel, and, when appropriate, authorizes the contracting officer to approve the commitment.

The commitments discussed above take place outside the usual procurement process and consequently weaken DOE's overall control over contract awards. In this regard, DOE's policy is to discourage informal commitments. However, DOE officials were not aware of any informal commitments which had not been approved. DOE procurement officials informed us that they hope that, by accepting these requests and working with program officials, they can eliminate the use of informal commitments. As part of this effort, DOE procurement officials held a meeting on March 30, 1979, with program officials from all divisions. Procurement officials discussed the problems of informal commitments and noted that such commitments result in inefficiency, dilute the strength of normal negotiation positions, and reduce the time available to seek financial, legal, or other assistance from other DOE organizations. This meeting does not appear to have had much effect on eliminating informal commitments. We noted that 8 of the 21 informal commitments have been approved since the March 30, 1979, meeting.

TASK ORDER CONTRACTS

A task order contract is a contract which establishes a relationship between the Government and a contractor for the purchase of a specific amount of time. The amount of time is usually stipulated in terms of direct staffdays or hours. Task order contracts are usually awarded competitively with a general statement of work. Specific duties or work to be performed are not included in the contract. After the contract has been awarded, the contractor is given task orders which specify work to be performed. The contractor does not compete for task orders. In effect, these contracts create a pool of resources for DOE to have work performed when requested. Of the 124 contracts we reviewed, 26 were task order contracts.

A graphic illustration of the general statement of work contained in task orders occurred in 5 of the 26 task orders we reviewed. These contracts were to provide support services to one DOE program office. The statement of work incorporated into each of the five contracts required the contractor to perform technical, behavioral and economic analysis of policy issues which affect the utility industry. In each statement of work there was only a one phrase change shifting the emphasis from one project area (e.g., financial) to another (e.g., supply planning). The work statements lacked (1) a description of what was to be analyzed within each subject area, (2) standards which would make it possible for both parties to measure performance or end results, and (3) specific duties required of the contractor.

While task order contracts may be initially awarded competitively, we believe general work statements, such as that mentioned above, make fair and meaningful competition difficult and may not assure that DOE obtains acceptable products at the lowest possible cost.

Another situation which may further limit competition is a method of funding task order contracts called "piggy backing." Piggy backing occurs when a task order contract is awarded for work for one program office, but that program office does not intend to commit funds for the entire contract amount. Tasks may be assigned subsequently from other program offices and funds from the other program offices are transferred to cover the estimated cost of the task. This practice, like all task order contracts, tends to avoid competition in all but the original contract (if that contract was awarded competitively).

An example of this is a task order contract awarded to assist one program office in the analysis of information and assessment of policy options and legislative proposals. Maximum funding for this contract was $200,000. This contract was piggy backed by another program office by issuing a $75,000 task order to assist that office in expediting the commercialization of coal conversion technologies.

This example is not isolated. The same program office which originated this contract has had contracts awarded with an aggregated maximum funding of approximately twice the actual budget of that office. Program officials explained that this was done in anticipation that other DOE offices would fund the portions of the contracts not funded by the originating program office. If the remainder is not funded, procurement officials have to renegotiate the contract to reduce its face value. While there exists a risk with all contracts that initial estimates are in error and they must be renegotiated, the practice of initially overestimating contract amounts increases the risk of renegotiation.

QUICK-REACTION WORK-ORDER MASTER CONTRACTS

One of the five DOE organizations which we reviewed also uses a type of contracting called quick-reaction work-order master contracts. This type of contracting tends to limit competition for work in certain areas to a relatively small number of contractors for a long period of time. A quick-reaction work-order master contract contains a general statement of work. Similar master contracts are awarded to a number of firms. Specific work orders (for some type of end item, rather than for staffdays as in task order contracts) are formulated by program personnel, and proposals are solicited from at least three of the firms holding master contracts. The proposals submitted are evaluated and the work order is awarded to the best offerer, price and other factors considered. Department officials informed us that these contracts are used only for work orders of great urgency which cost $250,000 or less and require performance periods of 6 months or less.

Quick-reaction work-order master contracts require DOE to pay the contractor a specific amount even if the contractor has not been awarded any work orders. In our view, this does not appear to be an effective expenditure of Federal funds. In effect, the contractor is on a retainer for the Government. Of the 124 contracts we reviewed, 50 were technical consulting and management support quick-reaction work-order master contracts which DOE awarded to 25 different contractors (2 contracts per contractor). These contracts were awarded in September 1978 for 1 year with options to extend them for another year. DOE exercised these options. The contracts could involve expenditures in excess of $175 million. DOE is committed to pay $2,500 for each contract even if a work order is not awarded under the contract. Since these contracts were awarded, 32 work orders have been issued under 22 different contracts. If work orders are not awarded under the remaining 28 contracts, DOE will be required to pay a total of $70,000 for having the contractors available, even though they did not actually work for DOE.

Under quick-reaction work-order master contracting DOE's policy is to solicit at least three contractors to bid when work develops in an area. Even though DOE has, in effect, paid the contractors to have qualified staff available, procurement officials informed us that in the past the contractors often did not bid because they did not have the personnel or expertise available at the time or did not believe they were required to bid. Competition among three contractors will be used only if there is sufficient time for the shortened procurement process. DOE officials informed us that if the work orders are awarded sole-source, the same procedures and standards are followed as with all sole-source contracts.

CHAPTER 3

CONTRACTOR INVOLVEMENT IN THE PERFORMANCE OF BASIC MANAGEMENT FUNCTIONS

When using contractors, care must be taken to assure that contractor support activities do not supplant normal management functions. Both the Office of Management and Budget (OMB) and DOE recognize the potentially damaging effects of having private enterprise perform basic management functions for the Government. To mitigate these negative effects, OMB has issued directives and DOE has published orders regulating the behavior of Government in its relationship with its contractors. Specifically, the orders state that contractor personnel should not perform tasks involving basic management responsibilities of the Government: e.g., selecting and directing Government employees, assigning organizational responsibilities, establishing performance goals and priorities, evaluating employee performance, conducting program planning and development, and promulgating departmental regulations or policies.

Although DOE officials have stated it is not their intention to contract for the performance of basic management functions, they have awarded contracts which appear to require the performance of such functions. These contracts appear to allow contractors wide latitude for participating in the development of Federal energy policy and offer the potential for allowing the contractor to determine energy policy. While the extent to which this is occurring throughout DOE can only be determined by a complete review of all DOE contracts, we found contracts in each of the five organizations we reviewed which appear to require the performance of basic management functions. It appears to be the practice of DOE's headquarters procurement office not to question the scope of work and to rely exclusively on the program offices for determining needs and defining the scope of work. It, therefore, appears that the potential for contracts requiring the performance of basic management functions exists throughout DOE.

One contract which was written so as to require the contractor to perform the basic management functions of planning and development, and establishing goals and priorities was a task order contract for $363,157. This contract was awarded to a firm to provide planning, economic, and technical analysus in the area of energy storage. Specifically, the contract required the contractor to:

- —Determine the need for, and timing of, energy storage projects.
- --Review and update energy storage plans.
- --Support the program office with quick response support on issues arising from congressional requests, budget information, congressional hearings, and other hearings and meetings.

While procurement directives and orders are quite clear that contracting for basic management functions is not permitted, there appears to be no clear delineation between the performance of a basic management function for DOE and assisting DOE in the performance of such a function. For example, it is often difficult to distinguish between a contractor participating in a policy decision made by DOE employees and a contractor actually making the policy decision for DOE. Some DOE contracts are being structured so that there is only a general statement of a basic policy problem and little, if any, guidance from the program office as to what work the contractor is to perform and how it is to be performed. Setting the parameters of the problem and devising solutions is being left to outside sources. We believe that this type of contract affords the contractor the opportunity for considerable input in policy determination and offers the potential for the contractor to actually determine energy policies for DOE.

An illustration of such a contract is an ongoing DOE study of the feasibility of establishing a national power grid system for electrical power transmission. Based on an earlier study of this issue by the Congressional Research Service, the Senate expressed concern that the authors of the study were forced to rely on data supplied by industry sources which strongly opposed a national power grid.

In a letter dated September 12, 1977, to the Secretary of DOE, the late Senator Lee Metcalf requested that DOE prepare a similar report to the Congress by March 1978. Senator Metcalf specifically asked DOE to use its own employees to conduct the study. In an October 5, 1977, letter to the Senator, the Secretary of DOE stated that DOE was committed to undertaking this study and that it had his full approval and support. About the same time, the President specifically directed DOE to address the issue of a national power grid. However, after performing a preliminary analysis, DOE determined that it could not complete the study within the requisite time frame and that it would be too expensive to conduct in-house. DOE decided to use industry data and to rely on contractors.

Approximately $500,000 was spent for eight contractors to perform the bulk of the study including generating proposals for the restructuring of the national power grid. In addition, parts of the work which originally were assigned to DOE, including planning for the study, were actually performed by the utility industry through one of its council organizations. Senator Metcalf specifically cited this council when he expressed concern about using industry sources. Nine of the council's representatives were involved in the study, despite the vested interests of the utility industry and the congressional request for objectivity. While DOE may exercise the ultimate policy decision (the contracts have not yet expired), the contracts allowed for considerable contractor input and influence in DOE policy determination.

We found other contracts which appear to offer contractors opportunity to either determine or substantially influence energy policy. One contract in the amount of $9,900 was for a study to determine DOE's authority to control anticompetitive practices of common carrier petroleum pipelines. DOE officials told us that the study resulting from this contract is the basic source document for making petroleum pipeline regulation policy decisions.

Another contract for $87,000, was for a study to (1) identify DOE's responsibilities for dealing with energy emergencies, (2) design and develop an energy emergency planning process, (3) define a strategy for implementing an energy emergency-planning process, and (4) assist in the establishment of a strategy for distributing fuels in periods of short supply. DOE officials informed us that the contractor was selected, in part, because it is a firm which has sufficient credibility and reputation that senior Government officials would feel comfortable with its judgements.

In the above illustrations, it appears that the contracts' statement of work requires the contractor to perform basic managment functions. Whether the contractor actually performed these functions or only assisted DOE in their performance is open to debate. In the examples found during our review, lack of available in-house expertise was often cited as a reason why a contractor was hired. Such lack of in-house expertise would, however, in our view, limit the ability of DOE to consider energy policy, planning, or priority options other than that proposed by the contractor. It would appear that the confusion as to who actually performed these functions could be substantially reduced if the contract specifications were written to include basic policy, priority, or planning options and the contractor was then asked to delineate the relative advantages and disadvantages of each.

CHAPTER 4

NEED FOR MORE CONTROL OVER DOE'S CONTRACT ADMINISTRATION

Contract administration is the process of enforcing the terms of a contract through such actions as evaluation of technical progress, monitoring contract deliveries, and approving periodic and final payments. Contract administration does not end until the work effort has been accomplished and accepted by the Government and the contract is closed.

DOE's procurement office--and more specifically its contracting officers--is responsible for all DOE contract administration activities including monitoring contractor performance and costs, and closing out contracts in a timely manner. The contracting officers have delegated most contract performance and cost monitoring to DOE's program offices and have delegated other contract administration duties to other Federal agencies. As a result, the procurement office exercises far less control over contracts than it should to ensure that the Government gets needed products at reasonable prices. Additionally, because contracts have not been closed out in a timely manner, DOE does not have final assurance that Government funds were properly expended for work performed. Untimely closeouts could also eventually lead to claims by the contractor which may be difficult and costly for DOE to handle as time progresses.

CONTRACT MONITORING

Contracting officers, in discharging their duties, need the assistance of the DOE program offices. This is especially true where, for example, the data for evaluating progress and performance and for approving payments involve highly technical terms and complex subjects not entirely familiar to contracting officers.

Program officials in DOE headquarters currently do far more than provide assistance to the contracting officers. According to procurement officials, contracting officers delegate most technical and cost monitoring activities to the program offices. However, they retain approval authority for any contract changes requiring the signature of a contracting officer. DOE contracting officers also have given program officials authority for approving payment vouchers for costs which the Government will pay during the contract period. Only the vouchers for the first and final payments to the contractor are approved by a contracting officer.

DOE's headquarters procurement office is currently delegating other contract administration functions to the Defense Contract Administration Services (DCAS), an agency of the Department of Defense. These functions include administrative responsibilities such as monitoring the contractor's (1) financial condition, (2) compliance with labor standards provisions of the contract, and (3) system for control of overtime. In addition, the Defense Contract Audit Agency performs preaward and closeout audits on contractors for DOE.

According to DOE procurement officials, contract administration functions are delegated because the procurement office lacks sufficient staff to carry out the functions internally. They say the necessity for fulfilling DOE's mission through the procurement process has resulted in the efforts of the procurement staff being directed at contract award and modification rather than administration responsibilities. Although DOE has made several analyses of procurement staffing, no final staffing decision has been made. DOE officials informed us that a mitigating factor to increasing procurement staffing needs is the current emphasis on decentralization. As more activities are moved into the regions, the pressures on headquarters procurement staff should diminish.

Federal Procurement Regulations assign contracting officers responsibility for administering contracts, including ensuring compliance with contract terms and conditions. Delegation of certain functions is not, in itself, an undesirable practice. Procurement officials said that OMB encourages such delegation to better utilize the Government's resources. However, by delegating administrative contract functions outside the DOE procurement office to the extent that they have, contracting officers have abrogated this responsibility and risk losing essential control over contracts after award. In addition, reliance on program personnel to review and approve contractor cost vouchers and provide interpretation of the contractor's performance does not provide for adequate separation of duties between the program personnel sponsoring the contract and the procurement office. Under current DOE practice, program personnel who initiate procurement requests are also responsible for contract monitoring. Since program personnel are mission oriented, it would appear that their primary interest must lie in accomplishing their mission, more so than carrying out contract administration responsibilities.

UNTIMELY CLOSEOUTS OF COMPLETED CONTRACTS

The actions that the contracting officer takes in closing out contracts include making sure that (1) Government funds have been fully accounted for and properly charged for work performed under the contracts, (2) all Government property in the contractor's possession is accounted for, 1/ and (3) final acceptance of the contractor's work and payment of a final voucher are appropriate.

DOE procurement regulations established a standard that contracts should be closed out in 3 months for purchase orders, 6 months for firm fixed price contracts, and 20 months for all other contracts. A listing prepared by the headquarters procurement office showed more than 2,500 expired headquarters contracts which had not been closed out as of March 13, 1979. These contracts had a face value of over $3 billion. There are 867 contracts on the list that are 20 or more months old; 237 of these are between 3 and 5 years old; and another 19 are more than 5 years old. Procurement officials estimated that all 2,500 contracts should have been closed out in 20 months.

Because these contracts have not been closed out in a timely manner, DOE does not have sufficient control to assure that Government funds were properly expended for work performed. DOE procurement officials did not know the amount of funds withheld pending final closeout for these contracts or how much Government-owned equipment remained in the contractor's possession. They stated, however, that they could obtain the information on a contract by contract basis from DOE's Office of the Controller. Procurement officials again told us that the lack of staff was the main reason for the backlog of expired contracts.

DOE procurement officials have recognized that more timely contract closeouts are needed. All expired DOE headquarters contracts are now being given to DCAS to be closed. This effort began in early 1979 when the procurement office hired a contractor to collect, organize, and send the necessary contract information to DCAS. As of October 5, 1979, DOE reported that about 1,300 of the 2,500 expired contracts have been sent to DCAS, and about 650 had been closed out by DOE headquarters personnel. DOE officials believe about 200 of the contracts originally were listed in error. Procurement officials believe the remaining contracts will be sent to DCAS by the end of 1979.

1/DOE's Office of the Inspector General is currently reviewing how DOE keeps track of property in the hands of the contractor. A report is due to be issued to the Secretary of Energy by the end of October 1979.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

DOE is the largest civil procuring activity in the Federal Government, reporting 5,000 contracts totaling over $8.5 billion for fiscal year 1978. It is apparent therefore, that DOE's procurement system must operate effectively and efficiently to assure (1) that the Department contracts for goods and services which are actually required and (2) that it obtains acceptable goods and services at the lowest possible price. DOE's procurement system is not, in our opininion, operating as effectively or efficiently as it should.

Our review of contracting practices which are used for five DOE organizations disclosed areas needing improvement. These relate to (1) contracting practices which avoid or limit competition, (2) contractor involvement in the performance of basic management functions, and (3) need for more control over contract administration.

Competition is probably the single most effective way to ensure that the Government is obtaining acceptable goods and services at the lowest possible price. The procurement practices which are used for the five DOE organizations we reviewed showed extensive use of task order contracts and quick-reaction work-order master contracts. In addition, the justifications for sole-source procurements are not adequately documented to show that only one firm was competent and available to do the required work. All of these practices avoid or limit competition.

At the same time, energy problems are becoming more complex, and energy planning and policy decisions are having greater nationwide impact. Program officials responsible for developing solutions to these problems in each of the five organizations we reviewed are awarding contracts which require private firms to perform basic management functions. Federal procurement policies recognize the danger in this dependence, and DOE and OMB have issued specific directives and orders designed to eliminate the practice. Reliance on contractors to perform these governmental functions can dilute DOE's ability to retain essential control over its programs and to assure that its programs are being carried out efficiently and economically.

We also noted weaknesses in contract administration, notably contract monitoring and closeout of completed contracts. DOE's contracting officers are relying on program personnel to review and approve contractor cost vouchers for payment and to monitor the technical progress of the contractors' work. The practice of delegating full responsibility for these areas to program personnel weakens DOE's control over the work performed by outside contractors. In these instances, the Government has less assurance of obtaining satisfactory products and services. We are also concerned with the backlog of contracts awaiting closeout action. Although DOE has taken steps to send expired contracts to DCAS for closeout and has thus reduced the workload for DOE procurement personnel, we believe DOE's responsibility for the contracts has not ended. DOE contracting officers should monitor DCAS progress on contract closeouts to ensure that further delays are not taking place.

All of the problems noted have resulted from not adhering to sound procurement practices. During our review, we noted a general attitude that DOE's procurement system exists primarily to facilitate the work of the program offices. Although the procurement system of any Federal agency must operate as a service organization, it must also function as a guarantee that sound procurement practices are followed. While these two roles are not completely compatible, a balance must be achieved which assures that program needs are met and sound procurement practices followed.

Because DOE's procurement office appears to be stressing its role as a service organization at the expense of adhering to sound procurement practices, we believe both program and procurement personnel would benefit from undergoing a reeducation process with respect to the proper procurement roles and responsibilities of DOE's various activities and the importance of adhering to sound procurement practices.

In addition, we believe that because of the heavy reliance upon contractors, DOE's procurement activities should be periodically monitored to ensure that the problems we noted do not recur and that other procurement problems do not exist. As part of this periodic monitoring, the assistance of DOE's Office of the Inspector General may be beneficial.

RECOMMENDATIONS TO THE SECRETARY OF ENERGY

To correct weaknesses in the Department's contracting which are noted in this report, we recommend that the Secretary of Energy direct DOE to:

--Take action to ensure that competition for DOE contracts is maximized and that sole-source contracts, task order contracts and quick-reaction work-order master contracts are used only as exceptions to normal contracting practices.

—Establish specific guidelines to more explicity delineate the types of management tasks which are and are not acceptable for contractors to perform.

To ensure that DOE's procurement office maintains effective control over awarded contracts, we recommend that the Secretary of Energy direct that contracting officers maintain administrative control over contracts in the areas of voucher approval and contract monitoring and maintain responsibility for contracts assigned to other Government agencies for closeout.

In regard to the need for adhering to sound procurement practices, we recommend that the Secretary of Energy establish a training program to reeducate procurement and program personnel in their respective procurement roles and responsibilities.

In addition, to ensure that sound procurement practices are followed and will continue to be followed, the Secretary of Energy should direct that a DOE-wide review be made of contracting policies and practices and require that these policies and practices be periodically monitored. As part of this effort, the Secretary should ask for the assistance of DOE's Office of the Inspector General.

(300530)

Department of Energy
Washington, D.C. 20585

January 14, 1980

Honorable John D. Dingell
Chairman, Subcommittee on Energy
and Power
Committee on Interstate and
Foreign Commerce
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

In response to your letter, the Department has reviewed the November 2, 1979, Comptroller General's Report EMD-80-2, "The Department of Energy's Practices for Awarding and Administering Contracts Need To Be Improved." Our comments on the report, conclusions, and recommendations are set forth in attachment 1. A brief synopsis of the recommendations and our position follows.

- The report requests the Secretary to take action to ensure competition for Department of Energy contracts. A Departmental Order that will further emphasize the importance of competition in the procurement process will be issued. The report also requests specific guidelines be established to delineate more explicitly what types of management tasks are, or are not, acceptable for contractors to perform. The Department's existing guidelines are consistent with Government policy and directives, but this area requires constant surveillance and we are committed to making management improvements.

- Another recommendation by the Comptroller General is that the Secretary ensure that procurement offices maintain effective control over awarded contracts by directing that Contracting Officers maintain administrative control over voucher approval, contract monitoring, and closeout. In the Department of Energy, as in other Federal agencies, the heads of its procuring activities are responsible for the procurements assigned to their activities. This responsibility is exercised through a system of delegations of authority and responsibility to Government personnel. The Department's position is that its system for voucher approval and contract monitoring is proper and quite consistent with that in other agencies; nonetheless, we will continue to examine our practices in these areas so that we can strengthen our control over awarded contracts.

- As for closeouts, our procedures are considered adequate. We do, however, have a large backlog at Headquarters stemming from a large number of contracts from predecessor agencies. We are working actively to reduce this backlog.
- We agree with the recommendation that our procurement and program personnel must know and understand their respective roles. As a result we will expand our current training program to emphasize further this area.
- In response to the recommendation that a Department-wide review of our policies and practices be made, our comments reflect current review responsibilities of both Procurement and the Inspector General and also point out that an in-house review of Procurement has just been completed.

The additional specific data requested by your letter is included under attachments 2 through 7. We have attempted to be totally responsive in providing all of the data in exactly the manner requested. In some cases, however, the data you requested is not available within our procurement management information system. We have provided a listing of contracts and a listing of Contracting Officers assigned to a particular buying activity (see attachments 3 and 7). Also, we cannot match a particular contract requirement to the initiating office's budget as requested. The Contracting Officer can and does, in fact, assure that all contracts are properly structured to assure that the Government's obligations are properly supported by a valid certification that funds are available.

We have considered your request that the Department refrain from entering into any new "Task Order" or "Quick-Reaction Work-Order Master Contracts." Based on an assessment of the potential adverse impact on the Department's energy programs, it would be inappropriate to discontinue these types of contracts. It is imperative to the Department's mission that certain support services, particularly those associated with on-going programs, continue to be available. These services are primarily provided under "Task Order" contracts, a contract type commonly used by many agencies, rather than "Quick-Reaction Work-Order Master Contracts," a contract type less commonly used.

We will limit the award of "Quick-Reaction Work-Order Master Contracts" to the greatest extent possible. Although the GAO has questioned the legality of these types of contracts, the Department has consistently held the position that the acquisition of services under these types of contracts does not violate any Federal Procurement Regulations and is in fact completely consistent with the letter and spirit of applicable laws, OMB Directives, and Federal Personnel Manual Letters.

With respect to your request that the DOE Headquarters personnel immediately discontinue the practice of approving contracts where "informal commitments" are made by program personnel "without following the usual procedures for award of contracts," we will continue to evaluate each case presented for ratification in accordance with existing Federal and DOE Procurement Regulations and policies. This evaluation will assure that any ratifications made are consistent with the regulations and policies. We have recognized the potential liabilities resulting from the unauthorized initiation of work on an informal basis (i.e., "informal commitments") and, prior to receipt of the GAO report, we initiated a procurement orientation program to indoctrinate program and procurement personnel as to their respective roles and responsibilities. This program includes, as a special topic, ratification of unauthorized commitments (see attachment 4). Additionally, we will issue directions raising the level of approval for ratifying actions to the Chief Financial Officer, who reports directly to me.

The Department shares GAO's concern on a number of the issues raised, and, while we are not necessarily in agreement with all of the findings, conclusions, and recommendations presented, we do appreciate the opportunity to offer our comments. As indicated by the Department's response, efforts have been underway for some time to increase competition, limit the incidence of informal commitments, and improve performance in the area of contract administration and closeout.

Sincerely,

C W Duncan

Charles W. Duncan, Jr.
Secretary

Attachment 1

DOE COMMENTS ON GAO REPORT
EMD 80-2, DATED NOVEMBER 2, 1979

I. CONTRACTING PRACTICES WHICH AVOID OR LIMIT COMPETITION

This chapter of the report raises the issues of (i) DOE does not appear to be offering maximum opportunity for competition in its procurement activities and (ii) DOE is using certain procedures which either avoid or restrict competition -- e.g., task order contracts and quick-reaction work order master contracts.

Non-Competitive Procurement

The report concludes that of 124 contracts reviewed, 38 were awarded on a sole-source basis, and that 29 of the 38 did not adequately document that only one firm was competent and available to do the work. The report does not provide persuasive evidence documenting this allegation. One example that was provided indicated that the DOE's justification was on the basis that the proposed contractor was the only firm with access to the required data base and with experience in dealing with files and mailing lists. The report goes on to say that -- "this may not have been the case." It continues by saying "DOE may have made these awards based on their best knowledge" and "these cases indicate that a competition may have been available and perhaps the program officer did not aggressively seek other firms.'

In the other example used, the report indicates five firms other than the one designated as the only firm with expertise, were found who expressed an interest by requesting copies of the request for proposal but were denied. The Department's policy is to send requests for proposals to all interested parties. Without the specific identification of the five firms mentioned, DOE cannot verify if, in fact, that these firms were denied copies of the request for proposal nor can a judgment be made as to whether or not these firms would or could have qualified for the effort. It should be pointed out that the act of merely requesting a request for proposal does not necessarily mean the firm is interested in bidding and has no bearing on whether such a firm is capable of performing the effort.

"Informal Commitments"

In the area of "informal commitments," the Department's procurement regulation authorizes only the Contracting Officers to ratify such commitments. In that respect, we consider our written policies to be adequate. However, in order to assure implementation, we will issue an internal memorandum to all program and project officials to re-emphasize the importance of eliminating such commitments.

In addition, we are in the process of raising the level of approval for ratifying such actions.

"Task Order" Contracts

The GAO report fails to convey with regard to this contracting vehicle the situation in which it arises; what it accomplishes; and what it prevents. To the extent that task assignment (not "task order") contracts may be overused, we will assure that responsible procurement and progam officials are alert to the use of alternative methods which may offer an improvement and more control.

We have requested and recommended to GAO in a recent letter that it provide the Department with an opportunity to present our position as to the legality of and authority for the use of this contract vehicle.

Generally, these support services requirements cannot be specifically defined at the outset of the procurement. However, the Department defines in its Request for Proposals for these efforts (1) the generic description of the work and (2) the anticipated labor classifications and the estimated number of hours which the Department is procuring (level of effort). This definition provides a basis for fair competition of the entire contract.

In order to maintain a specific control by the Department of the expenditure of the level of effort thus procured, the contracts provide for issuing of task assignments by the Government. The contractor is obligated by the contract document to provide his estimate of the man-hours, labor mix, and costs of each task thus assigned. Upon agreement of the parties the task assignments then become a formal definition of specific requirements provided for within the scope of the contract.

This procurement vehicle has evolved as a method to provide a continuing defined support service function to a requiring program area. The specific needs of that area often arise suddenly and without warning, particularly in DOE when the Department must analyze a crisis situation and provide data to Congress, the President, OMB, and Department management. Without the tool of task assignment contracts, an individual contract would have to be awarded, delaying analysis for weeks. Such delays give rise to DOE employees making "informal commitments," when this type of contract is not in place, in order to meet the critical deadlines that are imposed upon them in order that the Federal Government may responsibly react to crises or prevent their occurrence. Specifically, in regard to the GAO report:

(1) It is true that "[t]he contractor does not compete for task orders (task assignments)." As explained above, competition has occurred at the award of the contract document, except in the case of the few sole source task assignment contracts. This fact is not made sufficiently clear in the report.

(2) There is no basis presented to support GAO's allegation that "general work statements, such as that mentioned above, make fair and meaningful competition difficult and may not assure that DOE obtains acceptable products at the lowest possible cost." In this regard, one should also look at the alternatives. The task assignment contract provides a second level of control since the Department formally assigns

the work. If no task assignments were issued, the contractor's use of hours would be uncontrolled. Other contracting vehicles such as labor-hour contracts or time and material contracts might be used, but these provide every incentive for a contractor's inefficient use of this level of effort since he is provided in the computation of his hourly rates.

(3) The GAO report ignores the fact that task assignment contracts or other similar procurement vehicles are used in all or nearly all other Federal Agencies, including the National Aeronautics and Space Administration and the Department of Defense.

(4) The method of funding "task order" contracts referred to by GAO as "piggybacking" is used as an administrative convenience reducing the number of contractual documents required. When authorized by the contract, two or more program offices may issue task assignments under the same basic document but only if the proposed

piggybacked task assignment comes within the scope of the existing contract.

Quick Reaction Work-Order Master Contracts (QRWO)

The following comments are made in respect to this portion of the GAO report:

(1) The Department of Energy initiated informal discussions with the GAO's Office of General Counsel as to the legality and viability of the QRWO system in July of this year. A conference was held in July at GAO's offices and currently the Department's and GAO's Offices of General Counsel are maintaining a dialogue which will lead to a GAO opinion.

(2) GAO concludes that this method (and the task assignment contracts) should be "used only as exceptions to normal contracting practices." The report notes that "Department officials informed us that these contracts are used only for work orders of great urgency which cost $250,000 or less and require performance

periods of 6 months or less." Those conditions indicate that the QRWO system is used only on an exception basis.

(3) The report fails to identify that the QRWO system was designed to (a) reduce incidence of sole source procurements, where the rationale is urgency, (b) bring into an environment which might otherwise be a level of effort contract a competition at a second stage, (c) reduce incidence of "informal commitments," and (d) provide in our opinion a viable, legal procurement instrument by which urgent requirements can be awarded very quickly.

(4) The GAO report analyzes the $2,500 which the Department may be obligated to pay to the contractor under an individual QRWO Master Contract as a retainer. It states that the payment is required "even if the contractor has not been awarded any work orders."

In reality, the QRWO Master Contracts are contracts. In order to make them binding instruments, since it is possible that during the term of the contract a given contractor may not receive a work order under a master contract, the $2,500 is consideration. The Department is obligated to pay the contractor that amount only if he does not receive an award of a work order. DOE's potential liability is reduced each time a work order is awarded under one of the unused contracts. Two years remain on the system, which the GAO audit team reviewed, before the Government would be liable for any payment (assuming exercise of the second unilateral options by DOE).

(5) The report concludes that "[t]his type of contracting tends to limit competition for work in certain areas to a relatively small number of contractors for a long period of time." The QRWO Master Contracts may not exceed 3 years including options. They

are awarded as the result of open competition and multiple awards are made.

(6) The allegation in the report that "contractors often did not bid because they did not have the personnel or expertise available at the time or did not believe they were required to bid" is incorrect.

(a) It is the understanding of DOE's procurement officials that the reason the contractors did not bid each time they were solicited (as they are obligated by express provisions of the QRWO Master Contracts) was because they did not understand that they were required to, not that they lacked capability or capacity.

(b) The QRWO Master Contracts do expressly obligate the contractor to propose each time they receive a QRWO solicitation. That obligation is essential to the quick reaction design of the system and is the reason that the Department has made these QRWO Master Contracts legally enforceable contracts.

(c) The report fails to disclose that officials in the Office of Procurement Operations held a meeting with the QRWO contractors in July 1979, reminding them of their obligation in this regard. Since that meeting, there has been no such problem.

II. CONTRACTOR INVOLVEMENT IN THE PERFORMANCE OF BASIC MANAGEMENT FUNCTIONS

We agree with the GAO's statement that care must be taken to assure that contractor support activities do not supplant normal management functions. We have considered the issues raised by GAO and while we disagree with the central conclusion drawn by the GAO, it is recognized that special consideration in the award and administration of these type contracts is required to assure that the work performed is not in violation of Federal policy prohibiting the contracting out of basic management functions. As the GAO reports, DOE had already recognized the potential problem and had published orders to guide the Department's use of support service contractors. As the GAO further reports, DOE officials have stated that they have no intention to contract for the performance of basic management functions.

The GAO review discerned contracts which appear to require contractors to perform basic management functions. GAO found that the contracts appear to allow contractors wide latitude for participating in the development of Federal energy policy and to offer the potential for allowing the contractor to determine energy policy.

In illustrating its point, the GAO cites DOE's study of the feasibility of establishing a national power grid system for electrical power transmission. A close examination of DOE's approach to that study and its use of contractor input reveals the danger inherent in coming to any quick conclusions in this complex area.

The National Grid Study was undertaken by DOE in response to to a request by the late Senator Lee Metcalf to examine the feasibility of a federally owned and operated bulk electric power grid. His grid proposals were contained in legislation introduced as S. 1381. Prior studies of similar grid proposals had not provided adequate technical justification for a major Federal involvement in bulk electric power generation and transmission.

DOE initiated the study in the fall of 1977 during a period of organizational transition from its predecessor agencies. A new Office of Utility Systems, within the Economic Regulatory Administration, consolidating functions from FEA, FPC, and ERDA, was designated as the lead office for the study. A full-time project manager and steering committee representing other parts of DOE and other concerned Federal agencies were selected. The study was undertaken as a series of discrete technical tasks with work performed by in-house staff, Bonneville Power Administration, TVA, and other Federal agencies.

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Most of the detailed analyses were undertaken by outside consultants with the needed technical expertise and who were selected through competitive bids.

Because of its technical nature, much of this work could not have been performed in-house due to the department's limited personnel resources with the necessary special expertise. All contractor work was performed, however, under detailed task statements defined by DOE and closely monitored by the project manager and steering committee. All interim and final work products were immediately subjected to external review and comment (many of which were published together with the final technical reports).

The final report of the Grid Study (Volume I) --the report soon to be submitted to the Congress -- has been developed and written entirely by DOE staff with no contractor assistance. Considerable support was provided by staff on loan from the Bonneville Power Administration -- a resource specifically suggested by Senator Metcalf. The reports of the contractors were published as Volume II of the study. While these reports provided valuable input, Volume I is an independent policy statement of DOE and drafted by staff of this department. The use of contractors on this study enhanced the information base upon which conclusions and recommendations were formulated. It did not substitute for the independent and objective judgment of DOE staff in the policymaking process.

We have not presented this review of the National Grid Study merely as an attempt to rebut the conclusions expressed by GAO. However, this example illustrates that a review of the contract files alone does not provide sufficient information on how a program is being managed. In many instances, for example, the key determinant would be the critical review of the contractor's input by DOE officials. In the case of the National Grid Study, DOE used a fulltime project manager and a steering committee.

GAO has also reported that in the course of their review " ... lack of available in-house expertise was often cited as a reason why a contractor was hired", and that, "such lack of in-house expertise would, however, in our view, limit the ability of DOE to consider energy policy, planning, or priority options other than that proposed by the contractor."

We agree that in some instances the lack of in-house expertise is the basis for contracting out; however, we strongly disagree that contracting for services requiring a special expertise not available within the department necessarily limits the decision official's ability to consider other options. DOE officials may not have a specific expertise, possibly in a highly-technical area, to conduct some or even all of the needed work themselves. However, their expertise still enables them to identify options and to critically evaluate the contractor's recommendation.

We should also note that OMB Circular A-76 requires Federal agencies to contract for special expertise except when it is determined that the Government has a continuing need for the particular type of expertise involved.

We would also like to address the GAO's comment that, "It appears to be the practice of DOE's Headquarters Procurement Office not to question the scope of work and to rely exclusively on the Program Office for determining needs and defining the scope of work." The statement simply is wrong. While the basic responsibility for determining requirements is and should be with the Program Office, each request for procurement of support services must be reviewed and approved by the Assistant Secretary (or equivalent official) that supervises the Program Office. If the support services are expected to cost in excess of $250,000, the department's Director of Administration must also approve the request. In addition the Office of General Counsel reviews the requests to assure compliance with existing laws and regulations, including organizational conflicts of interest requirements and overall legal sufficiency. The Office of Controller maintains financial and other inventories mandated by OMB Circular A-76 and ensures that required cost comparison analyses are performed. For its part, the Procurement Office reviews each and every procurement request for compliance with all procurement regulations and DOE procedures.

The existence of those reviews by both DOE program officials and non-program components offers substantial control, but they do not and cannot guarantee that a contractor will never perform a basic management function. Accordingly, we recognize the value in GAO's recommendation that the department establish specific guidelines to more explicitly delineate the types of management tasks which are and are not acceptable for contractors to perform. While, it may be desirable to develop more specific guidelines, at least two significant factors should also be taken into account: first, to our knowledge, there is a distinct lack of Federal guidance in this area; and second, as we have noted, the key determinant often is the actual review and use of the contractor's input by DOE officials, as opposed to the contracting for certain tasks. Nevertheless, we recognize that GAO has highlighted areas which deserve constant management attention and which we must continually try to improve. In this regard, we appreciate the help and suggestions GAO has offered us.

III. NEED FOR MORE CONTROL OVER DOE'S CONTRACT ADMINISTRATION

The report states that (i) DOE's Contracting Officers exercise far less control over contracts than they should to ensure that the Government gets needed products at reasonable prices and (ii) because contracts have not been closed out in a timely manner, DOE does not have final assurance that Government funds were properly expended for work performed.

The report concludes that the Contracting Officer should not delegate technical and cost monitoring activities to the program offices if he is to properly discharge his duties. The Department takes exception to the implication that it is acting improperly on the basis that contract performance, particularly technical work performance, is under the cognizance of the program office. Cost monitoring has not been delegated to the program. In respect to the manner in which the Department administers contracts, it should be noted that it is consistent with approaches used in other Federal Agencies.

With regard to the Headquarters Procurement Office, we agree they have not been able to devote sufficient attention to certain areas of contract administration. This was due primarily to limited staffing and the need to give priority

to a very heavy workload of contract awards, and matters requiring immediate attention. However, during the past 2 years this office has taken a number of initiatives to improve its contract administration function. It was the lead DOE office for utilizing other contract administration service agencies to support the post-award administration of contracts. In addition, it was concluded that due to limited staff resources, it should:

- **Improve contract administration by substantial use of the services of the contract administration service agencies, e.g., Defense Contract Administration Service (DCAS), Office of Naval Research (ONR), and Defense Contract Audit Agency (DCAA) to augment the staff.**
- **Create a procurement assistant position in each contract execution division.**
- **Improve procedures for contract administration including Contractor Procurement System Reviews (CPSR), Closeouts, Post-Award Orientations, Financial Analysis, Termination, and Settlement of Overheads.**

It is noted that the Office of Management and Budget Policy Letter 78-4 dated August 8, 1978, which states "to facilitate the award and administration of contracts, agencies are encouraged to make use of cross-servicing arrangements with existing field contract administration and contract audit components", encourages the use of DCAS and other such reviews.

Certain contract administration functions are still being performed by the office, for example:

- Grants to State and local Governments, hospitals, and other nonprofit organizations, profit-making organizations, individuals, and foreign organizations; and contracts determined to be sensitive are administered "in-house."

- Price/cost analysis, for the most part, is performed "in-house." In addition, the property administration functions that are delegated are monitored by an Operations property administrator.

- Contracting Officer authority is not delegated.

In respect to closeouts, the primary emphasis in DOE and its predecessor agencies during the buildup of energy programs has been on the award of contracts. A large inventory of physically completed, but not closed contracts was the result. The resultant rapid buildup did not, however, detract from the importance of closeouts, but did cause procurement resources to be directed primarily to awarding new contracts.

The DOE Procurement Regulations require that the head of each procuring activity shall ensure that the necessary procedures and milestone schedules are established and resources applied to effect the earliest practicable deobligation of projected excess funds and the timely closeout of all procurements which are physically completed or otherwise eligible for closeout action. Specific timeframes after physical completion are established for the various instrument types. DOE performs Procurement Management Assistance Reviews of its procurement activities in which a check is always made concerning the status of contract closeouts. In addition, a procedure is being established to assist individual purchasing offices in reviewing contracts for closeout and release of excess funds.

The report indicates that because 2,500 Headquarters contracts had not been closed out, the Government does not have sufficient control to assure that Government funds were properly expended for work performed. In accordance with the following, it is considered that the report is misleading in this section.

During FY 1978, DOE's first year of existence, it was recognized that a special effort would be required to closeout the large number of expired contracts inherited from DOE's predecessor agencies. Accordingly, an agreement was entered into with Defense Contract Administration Service (DCAS) whereby DCAS would perform many of the contract closeout functions for DOE. Also, a contract was awarded to a minority owned company, in February 1979, for the performance of various "administrative support activities" to enable DOE to transmit the contracts to DCAS for closeout at the earliest possible date.

DOE had just begun the process of delegating the expired contracts to DCAS and focusing efforts toward closeout of these contracts when GAO conducted its audit. It should be noted that the March 13, 1979, list cited by GAO contained approximately 2,300 expired contracts (the remaining 200 were either active contracts or purchase orders), and that all of the contracts expired for 3 years or more were awarded and had expired prior to the inception of DOE.

Nevertheless, since DOE began its dedicated closeout effort, over 800 contracts have been closed out, and action has been initiated to closeout the remaining expired contracts.

IV. CONCLUSIONS AND RECOMMENDATIONS

The central conclusions drawn by the GAO in their investigation are: (1) the Department's procurement practices avoid or limit competition through the use of "task order" and "quick reaction work-order master contracts" and inadequately documented sole-source procurements; (2) contractors are performing basic management functions; and (3) the Department needs more control over contract administration. The GAO has further concluded that all of the preceding is the result of the Department's failure to adhere to sound procurement practices.

Although a number of the issues raised in the report confirm previous concerns within the Department which we have been working to correct, we do not believe that the depth of the GAO examination and the findings presented are sufficient to warrant the conclusions drawn. With respect to the first conclusion that the Department is avoiding or limiting competition through the use of "task order" or "quick reaction work-order master contracts," it is our opinion that these types of contracts in fact enhance the opportunity for competition. Because of the diversity of work associated with a given technology or program area, the support services requirements cannot be specifically defined at the outset of the procurement. Therefore, the Department defines in its request for proposal for these efforts (1) the generic description of the work and (2) a number of man-hours estimated to be required for accomplishment of the total effort (level of effort) through the placement of task assignment requiring specific work to be accomplished within the generic description. By consolidating the total estimated support requirement under a single solicitation, an incentive is given for maximum participation by all qualified firms in the competition. The concept of issuing task assignments (not task orders) under the contract was developed as a method to provide the Contracting Officer maximum control over the contract. The contracts are being structured to require that the Contracting Officer issues all task assignments. Thus, the Contracting Officer is afforded an opportunity to assure each assignment made is in accordance with the generic description of work and within the available manpower and funds remaining under the contract. The vast majority of all support service task assignment contracts are competitively awarded. For example in Headquarters during FY 1979, more than three-fourths of the dollars awarded for these types of contracts were competitive. For example, in one instance, we received over 90 proposals in response to a single solicitation.

In the case of "quick-reaction work-order master contracts," we initiated (in July 1979) informal discussions with the Comptroller General as to the legality and viability of the use of this type contract. It is the Department's intent to comply with any GAO decision rendered on the quick-reaction work-order contracting system; however, it is our opinion that this method of contracting offers distinct advantages to maximize competition by (1) reducing incidence of sole-source procurement supported by urgency, (2) introducing a second level of competition among the competitively selected participants, and (3) reducing the incidence of "informal" commitments.

The GAO conclusion that sole-source procurements are not adequately documented is not entirely supported by the findings. The report presents only one case wherein another source may have been available to perform the work; even in that case, no evidence was provided showing that the responsible program official did not make a good faith effort to identify another source or that the Department failed to comply with its published regulations applicable to the review and approval of the Justification for Noncompetitive Procurement.

As previously indicated in our comments on the report findings, it is the Department's opinion that the GAO conclusion that contractors are performing basic management functions is not correct. It is recognized, however, that special care is required in the authorization and management of support service type contracts because of their potential for misuse. Therefore, the Department has established policies through the publication of DOE Orders to assure compliance with all applicable Federal regulations, policies, and directives. We will continue to examine these policies and their implementation so that contractor support activities do not supplant basic management functions.

In addition, while we can agree with GAO's conclusion that the Department needs more control over contract administration, the GAO findings in support of their conclusion are in part inaccurate or misleading. GAO does not take into consideration the increase in workload that was never compensated with a corresponding increase in the number of billets to process the increase. The GAO report implies that full responsibility for the review and approval of contractor cost vouchers has been delegated to the program personnel. In fact, delegations to program officers were limited to the approval of vouchers for provisional payment purposes only; i.e., whether the percentage of completion of work under a contract justified the amount billed for the period covered by the voucher. This practice is no longer in effect as responsibility for the review and provisional approval for contract vouchers for Headquarters, Procurement Operations, contracts has been assigned under a Memorandum of Understanding to the Defense Contract Audit Agency (DCAA). DCAA reviews and approves DOE vouchers under the same guidelines used for the Department of Defense. Since DCAA already performs audit responsibility for almost all of DOE's contracts, they are in a good position to determine that costs incurred were reasonable, allowable, and allocable, as required for payments under cost reimbursement type contracts. The Contracting Officer retains control through the receipt of copies of vouchers and periodic financial information from DCAA and receives, reviews, and approves the final voucher.

Information pertaining to Contracting Officer control of voucher processing was indicated above. The recent change from technical personnel approval to DCAA review and provisional approval of vouchers (except the final) provides for better control than Contracting Officer approval. The

Contracting Officer does not have ready access to the contractor's books and records; accordingly, the auditor is in the best position to accomplish these actions.

In regards to maintaining responsibility for contracts assigned to other Government agencies for closeout, signatory authority for all contractual documents is retained by the DOE Contracting Officer. In addition, DCAS will furnish each procuring activity with periodic (quarterly) contract status information on active contracts and those in closeout. This procedure will require additional computer programming by DCAS and is in process at this time. Again, since the Contracting Officer is required to sign all contractual documents, he is aware of all documents and actions necessitating his review.

The utilization of other Government agencies for contract administration and other services is in consonance with OFPP Policy Letter 78-4, dated August 8, 1978, Subject: Field Contract Support Cross-Servicing Program. The purpose of this arrangement was to enable the Government to consolidate and coordinate common administrative requirements of various agencies, thereby also presenting "one face" to contractors. Through this arrangement, overlapping and duplication of effort is avoided or eliminated, including the placement of redundant requirements on contractors.

As the GAO report indicates, DOE has been relying on other Government activities, e.g., DCAS, DCAA, etc., to assist in performing contract administration, which has included contract closeouts. Contract closeout is a normal contract administration function, which is regularly performed after contract completion. In the future such closeout actions will be performed in the the normal course of business, thereby alleviating the type of inventory buildup currently being experienced. In the interim, our efforts will continue to complete, as quickly as practicable, the closeout of all physically completed contracts on hand.

In view of the preceding it is our opinion that the GAO report does not support a conclusion that the Department has not adhered to sound procurement practices.

The recommendations to the Secretary of Energy are addressed below.

RECOMMENDATIONS

—Take action to ensure that competition for DOE contracts is maximized and that sole-source contracts, task order contracts, and quick-reaction work-order master contracts are used only as exceptions to normal contracting practices.

The Department of Energy through its Directorate of Procurement will more diligently review and scrutinize each and every request for a non-competitive procurement to assure that it is clearly justified. In addition, a Departmental Order will be issued to further emphasize and assure that the use of a non-competitive procurement transaction must undergo careful and exacting scrutiny by those officials involved in its review and approval.

To permit our procurement personnel resources to more effectively assist in maximizing competitive procurements, we have initiated an advanced procurement planning effort DOE-wide. With this advanced planning effort and a more balanced scheduled workload, statements of work can be more comprehensively examined and the business strategies laid out toward maximizing the competition for contract award(s).

Finally, through the Integrated Procurement Management Information System, we have begun to track the extent of competitive versus non-competitive procurement actions for management analysis and improvements.

We feel the above managerial efforts and emphasis will enhance our ability to reduce the number of non-competitive procurements.

As indicated elsewhere in this response, task order contracts are widely used throughout the Federal Government and considered a normal contracting practice by DOE management. However, we will assure that the future award of new quick reaction work order contracts is limited to only the most urgent of circumstances.

--Establish specific guidelines to more explicity delineate the types of management tasks which are and are not acceptable for contractors to perform.

DOE Order 1370.1, "Review and Approval of Support Services Procurement Requirements," dated June 5, 1978, established Departmental policies and procedures for the review and approval of requests to procure support services by contract. The order sets forth guidelines for technical and management support services, and maintenance and operations services.

In addition, DOE Order 3230.1A, "Role of Contractor Personnel in Policy Development and in Representing the Government," dated August 28, 1978, identifies specific types of work which may and may not be performed by contractor personnel. This order supplements Federal Policy Guidelines as set forth in OMB Circular A-76, OMB Bulletin 78-11, Federal Personnel Manual Letters 300-8 and 300-12, and DOE Order 1370.1.

We recognize that there may be cases where the guidance provided by these orders has not been fully satisfactory in terms of complete assurance that a contractor will never perform a management task. Accordingly, we will continue to examine our polices and practices with a view towards improvements that will help assure that the work performed by contractors is not in violation of Federal policy.

--To ensure that DOE's Procurement Office maintains effective control over awarded contracts, we recommend that the Secretary of Energy direct that Contracting Officers maintain administrative control over contracts in the areas of voucher approval and contract monitoring and maintain responsibility for contracts assigned to other Government agencies for closeout.

In DOE, as in other Federal agencies, the heads of its procurement activities are fully responsible for the procurements assigned to their activities. This responsibility is carried out through a complex system of delegations of authority and assignments of responsibility to Government personnel. The Department's position is that its system for voucher approval and contract monitoring is proper and quite consistent with that found in other agencies; nonetheless, we will continue to examine our practices in these areas so that we can strengthen our control over awarded contracts. As for closeouts, our procedures, as indicated earlier, are considered adequate and we are actively working to reduce our backlog from predecessor agencies.

--In regard to the need for adhering to sound procurement practices, we recommend that the Secretary of Energy establish a training program to reeducate procurement and program personnel in their respective procurement roles and responsibilities.

In furtherance of improving acquisition activities within DOE, a procurement orientation program was initiated some time ago to indoctrinate program and procurement personnel as to their respective roles and responsibilities. The topic outline and handout (attachment 4) used in the briefing will be continually assessed for its further improvement as warranted. A total of 378 Headquarters personnel have attended the sessions conducted thus far.

An even more comprehensive orientation program is being developed, which will include the availability of a procurement guide for technical personnel. This program is proposed for application DOE-wide.

--In addition, to ensure that sound procurement practices are followed and will continue to be followed, the Secretary of Energy should direct that a DOE-wide review be made of contracting policies and practices and require that these policies and practices be periodically monitored. As part of this effort, the Secretary should ask for the assistance of DOE's Office of the Inspector General.

The Department continuously reviews its contracting policies and practices in a number of means. The Procurement Policy Group has the responsibility to develop procurement policies consistent with existing laws and regulations. There is a Procurement Management Assistance Review function in the Department that has the responsibility to review each Awarding Office periodically to assure compliance with existing policies and regulations. There is also the Department's Inspector General function which has the responsibility of assuring proper Departmental implementation. Furthermore, a DOE-wide in-house review of our procurement procedures has just been completed.

ATTACHMENT 2
To response to
Congressman Dingell's
Letter of Nov 9, 1979

FULL TIME PERMANENT POSITIONS
ASSIGNED TO PROCUREMENT

	1978	1979	1980	Oct. 1, 1980 Vacancies
Procurement Operations, HQ	101	94	96	2
Idaho Operations	25	25	27	0
Nevada Operations	12	12	12	0
Savannah River Operations	8	8	8	0
Chicago Operations	57	70	70	0
Richland Operations	20	17	17	0
Oak Ridge Operations	20	19	22	0
Albuquerque Operations	37	41	41	2
San Francisco Operations	20	20	22	0
Region 1, Boston, MA	0	0	0	0
Region 2, New York, NY	0	0	1	0
Region 3, Philadelphia, Pa.	0	0	0	0
Region 4, Atlanta, Ga.	0	0	1	0
Region 6, Dallas, TX	1	1	1	1
Region 7, Kansas City, MO	1	1	1	0
Region 8, Lakewood, CO	2	2	2	0
Region 9, San Francisco, CA	0	0	0	0
Region 10, Seattle, WA	1	2	6	0
Clinch River Breeder Reactor Project Ofc.	7	7	7	2
Fast Flux Test Facility Project Ofc.	5	5	5	1
Strategic Petroleum Reserve Project Management Office	11	10	10	2
Schenectady Naval Reactors Office	7	7	7	0
Pittsburgh Naval Reactors Office	8	8	8	0
Grand Junction Office	1	1	2	0
Naval Petroleum Reserves in California	5	11	15	0
Naval Petroleum & Oil Shale Reserves in Colorado, Utah and Wyoming	14	16	16	0
Morgantown Energy Technology Center	11	10	13	1
Pittsburgh Energy Technology Center	11	16	17	4
Bartlesville Energy Technology Center	7	6	6	0
Laramie Energy Technology Center	9	14	15	1
Grand Forks Energy Technology Center	3	4	5	0
Southeastern Power Administration	0	0	0	0
Southwestern Power Administration	2	2	2	0
Western Area Power Administration	23	31	36	4
Alaska Power Administration	1	1	1	0
Bonneville Power Administration	122	110	113	11

Number of DOE Finance Personnel Involved in Processing And Paying Vouchers FY 1978-79-80

Current DOE Finance Vacancies for Processing and Paying Vouchers FY 1980

	Personnel			Vacancies
Field Offices	'78	'79	'80	'80
Albuquerque	4	4	4	1
Chicago	8	8	8	-
Grand Junction	3	3	3	1
Idaho	5	5	5	-
Nevada	3	3	3	-
Oak Ridge	5	5	5	-
Pittsburgh	3	3	3	1
Richland	3	3	3	-
San Francisco	17	17	17	2
Savannah River	3	3	3	-
Schenectady	4	4	4	-
Washington Financial Services Division	13	14	15	1
Power Marketing Administrations				
Alaska Power Administration	3	3	3	-
Bonneville Power Administration	9	9	9	-
Southeastern Power Administration	4	4	4	1
Southwestern Power Administration	3	3	3	-
Western Area Power Administration	4	4	4	1
Regional Offices				
Boston, Massachusetts	2	2	2	-

Regional Offices	Personnel '78	'79	'80	Vacancies '80
New York, New York	2	2	2	-
Philadelphia, Pennsylvania	2	2	4	-
Atlanta, Georgia	2	3	3	-
Dallas, Texas	2	2	1	1
Kansas City, Missouri	3	3	3	-
Lakewood, Colorado	2	2	1	-
San Francisco, California	3	2	4	-
Seattle, Washington	2	2	2	-
Others				
Strategic Petroleum Reserve Office	4	4	4	-
Clinch River Breeder Reactor	3	3	3	-
Naval Petroleum Reserve	8	8	9	-
Environmental Lab, New York	2	2	2	-

Number of DOE Finance Personnel Who Support the Award and Administration of Contracts - FY 1978-79-80

Field Offices	'78	'79	'80
Albuquerque	2	2	2
Chicago	4	4	4
Idaho	1	1	1
Nevada	2	2	2
Oak Ridge	4	4	4
Savannah River	1	1	1
Schenectady	1	1	1
Power Marketing Administrations			
Bonneville Power Administration	1	1	1
Others			
Strategic Petroleum Reserve Office	0	1	1

Office of Budget, Office of the Controller:

	Number of Positions/Vacancies		
	FY 78	FY 79	FY 80
Number of Positions Filled	40	38	33
Number of Vacancies			4
Subtotal	40	38	37
Contract Administration	1	1	1
TOTAL	41	39	38

BRIEF DESCRIPTION OF PROCEDURES FOR PROCESSING AND PAYMENT OF VOUCHERS

The following are basic procedures applicable to all paying offices. There are, however, some minor variations in the total procedures utilized by a specific office in relation to another office because of organizational structure or staff.

- o Contracts and purchase orders are received from procurement.
- o Documents obligated and filed.
- o Receiving reports/invoices received in finance. Invoices are matched with receiving report. If no receiving report, invoice is sent to appropriate official to confirm receipt of goods or services as billed (GAO Title 7-23.1).
- o Receiving report and invoice matched and compared with ordering document.

  Audited for completeness, accuracy and compliance with terms and conditions of contract, accounting data and that it is not a duplicate (GAO Title 7-24.2, etc.).
- o Voucher is then scheduled for payment, reviewed and certified by appropriate official and check request sent to Treasury.

NOTE: At each step, appropriate records are coded to enter obligation, expenditure or adjustment to the general ledger.

Who Certifys Vouchers

Field Offices

Albuquerque	Frye, Brake, Fernando, Falas
Chicago	Wolatz, Fusiwana, Brown
Grand Junction	Kottman, Stavast
Idaho	Harten, Fisk, Fielding, Jones
Nevada	Gordon, Smith, Wedrow, Parker
Oak Ridge	Hensley, Smith, Johnston, Oster
Pittsburgh	Goldbach, Gaddis
Richland	Buckingham, Dutton, Pohlod, Maxson
San Francisco	Barnson, Hall, Chihara, Souza, Elster, Dixon
Savannah River	Tatam, Rolland, Buice, Farmer, Comar
Schenectady	D'Ascoli, Kaufman, Schecton, Erickson
Washington Financial Services Division	Woodward, Heuer, Ahern, Tyler

Power Marketing Administrations

Alaska Power Administration	Cross, Haag, Jarvis
Bonneville Power Administration	Haynes, Harwood, Muchow, Killin, Pfenning
Southeastern Power Administration	Cleveland, Easom
Southwestern Power Administration	Sykes, Webb, Bevins, Bowman
Western Area Power Administration	Cunningham, Migregon, Harris, Taylor

Regional Offices

Boston, Massachusetts	Urgo
New York, New York	Swartz

Regional Offices	
Philadelphia, Pennsylvania	Mangel
Atlanta, Georgia	Wallace
Dallas, Texas	Wyatt
Kansas City, Missouri	McDow, Brown
Lakewood, Colorado	Vallejo
San Francisco, California	Galyean
Seattle, Washington	Williams

Others	
Strategic Petroleum Reserve Office	Langmead, Washington, Ellison
Clinch River Breeder Reactor	Thulstrup, Marguess, Reeve
Naval Petroleum Reserve	Reigers, Moniz
Environmental Lab, New York	McGlinchey

Attachment 3
To response to
Congressman Dingell's
Letter of Nov. 9, 1979

DEPARTMENT OF ENERGY

CONTRACTING OFFICERS

Headquarters Procurement Operations:

Fred T. Madison
Stephen L. Lake
Robert S. Kirk
Robert A. Low
Stanley Kaufman
James A. Nelson
William F. Gaudette (Administration)
William A. Blumenauer
Elnora A. Altman
Joseph P. Cappello
Kenneth D. Sowell (Administration)
Robert M. Webb
Marcia L. Morris
Coleton Weirich
Charles C. Shank
Jeffrey Rubenstein
Eugene F. Callaghan
Ben Goldman
Thomas J. Davin, Jr.

Bonneville Power Administration:

Burton H. Jarvis
William H. Simpson
Norman L. Linscott
George E. Lough
Harvey D. Waybright
David J. New
Steven C. Kalloo
Henry W. Dunn
Hazel N. Torango (Small Purchases)
Betty L. Allen (Small Purchases)
Fay F. Olson (Small Purchases)
Tamra Swerdlik (Small Purchases)
Rex S. Lapp (Small Purchases)
Janice R. Crawford (Small Purchases)
Mary Thiede (Small Purchases)
George McGowan
Johannis Schimmdlbusch (Small Purchases)
Grace Miller (Small Purchases)
Sterling Munro

Western Power Administration:

Robert L. McPhail
Thomas L. Ramsbacher (Small Purchases)
J. J. Juba (Small Purchases)
Vernon P. Hartwick (Small Purchases)
Harvey C. Rau
Walter R. Terry
Arthur E. Moser (Small Purchases)
James R. Rooks
Phillip N. Murphy
Thomas F. Sturgeon (Small Purchases)
Arthur A. Anderson
Gary J. Giles (Small Purchases)
Elmer C. Peterson (Small Purchases)
Garth Phillips (Small Purchases)
Leo A. DeGuire (Small Purchases)
Dean W. Davis (Small Purchases)
David J. Waltzman

Alaska Power Administration:

Robert J. Cross
E. Robert Haag (Small Purchases)
Otto Whitfield, Jr.
Ralph B. Alps (Small Purchases)
Thomas J. Wilde (Small Purchases)

Southeastern Power Administration:

Harry F. Wright
Mary G. Bond (Small Purchases)
Patsy R. Griffith (Small Purchases)

San Francisco Operations Office:

Joe LaGrone
Don Pearman
Richard DuVal
Susan Brechbill
Robert Ragan
Gene Steffy
Larry Browning
Joann Littlehales
Dave Tenes
Robert Tomihiro
Robert Padgett
Jim Harrington
Earl Schalim
Kathy Day
Charles Berger
Robert Todaro
Michael Harper
Edward Stabb
Roy Meyer
Mike Donkoski
Dean Yoshida
Ricky Visoria
William Nettleton
Arlene Marinell
Robert DeWitt
Ron Horan
James Hartman
Richard Schweinberg
James Corcoran
John Russell
Sam Maras
Gertrude Campbell
James Brucia
Roger Harris
Norah Pantoja
Donna Dare

Albuquerque Operations Office:

H. E. Roser
T. R. Clark
H. B. Leenhouts
Kent Campbell
H. M. Turpie
T. C. Cone
P. R. Wagner
C. E. Gay
D. G. White
H. N. Hill
R. M. Munson
R. Bulcock

Albuquerque Operations Office (continued)

- T. F. Johnston
- R. D. Taylor
- B. Sanchez
- A. F. Baker
- C. E. Thurman
- W. Purchase
- O. Ballino (Small Purchase)
- L. Dubuque (Small Purchase)
- W. G. Fay (Small Purchase)
- G. Maldonado (Small Purchase)
- S. Morris (Small Purchase)
- Zane Hopper (Small Purchase)
- T. V. Hill
- B. L. Moore
- Tom Uko
- Dallas Mayfield
- K. R. Braziel
- G. M. Granere
- L. E. Warren
- P. M. Raney
- J. H. Jeffries
- Don Ofte
- J. R. Hicks
- C. H. Barkmeier
- G. E. Cordova

Regional Office III, Philadelphia:

- D. Kernodle
- W. Kaplan
- A. Lemon

Savannah River Operations Office:

- H. Stetson
- Robert H. McFeely
- E. Gray Swingle
- Donald C. Drennon
- Ronald D. Simpson
- W. Neil Farfour
- Roy A. McGahee (Small Purchases)

Pittsburgh Energy Technology Center:

- Sun W. Chun
- Louis J. Ruzzo
- Daniel H. Booker

Environmental Measurement Lab:

- John H. Horley
- Jonathon P. Ford
- Kevin C. Buckley

Chicago Operations Office:

Robert H. Bauer
Fred. C. Mattmueller
Lillian M. Banahan
Donald L. Bray
Harold W. Miller
James A. Miller
Bruno J. Sarocka
Donald J. Carden
Bartley J. Billings
John D. Hart
Roland J. Bahns
David Schweller
Marvin J. Laster
Joseph F. Frino
Robert N. Drucker
Gregory J. Ogeka
Robert A. Friess
Jerold S. Opkins
David C. Rardin
Charles M. Skinner
William V. Nelson (Administration)
James E. Fletcher
John J. Mahoney
Jane L. Monhart
Johnnie D. Greenwood
Thomas R. Katisch
Dana R. Dixon
Seymour Zirin
Martin A. Langsam
Robert W. Laza
Richard C. Martello
Anthony Puccillo, Jr.
Alan E. Smith (Sales, Small Purchases)
Joe M. Freeman (Sales, Small Purchases)
Carleton D. Bingham (Sales, Small Purchases)
Charles E. Pietri (Sales, Small Purchases)
Rorg S. Simpson (Sales, Small Purchases)
William P. Peterson
John P. Kennedy (Administration)
W. Stephen Savle

Strategic Petroleum Reserve Pro Man:

Donald W. Mazur
W. H. Keith
William C. Gibson
George A. Maki
Maurice Grabor (Small Purchases)
C. Bellam (Small Purchases)
E. Thiele (Small Purchases)
Gary C. Landry
W. T. Williams
Donald W. Murphy
Theodore T. Siomporas

Southwestern Power Administration:

James B. Hammett
Francis R. Gajan
George A. Kelly

Oak Ridge Operations Office:

R. J. Hart
James H. Hill
Percy Brewington, Jr.
Willis Davis
Jesse L. England
Eugene W. Gillespie

Oak Ridge Operations Office (continued)

Francis O. Christie
John D. Wagoner
Peter D. Dayton
Arthur H. Frost, Jr.
Don R. Sloan
Robert E. Lynch
Robert C. Lipman (Administration)
Clifford H. Black (Administration)
Wilbur L. Walker (administration)

Leslie H. Carrol (Small Purchases)
Nancy R. McGinty (Small Purchases)
Kenneth M. Haythorn (Sales)
James E. Rounsaville
H. Doran Fletcher
E. Raymond Sullivan, Jr.
Billy C. Scott (Administration)
Rodger A. Jump (Administration)

Morgantown Energy Technology Center:

Hollie R. Hodges
Daniel B. Dawkins

Jon G. Borgess
Julia Zilkanich (Small Purchases)

Richland Operations Office:

Alex G. Fremling
Lyell R. Bingham
John A. Anttonen

Jefferson O. Neff
Peter Sowa, Jr.

James L. Stringer
Willis L. Kimbell
Donald T. Gier
Jack C. Cummings
Larry J. Adams
Charles E. Troell

Nevada Operations Office:

Mahlon E. Gates
E. John Marriot
Raymon D. Cox
Daryl B. Morse
Ray D. Duncan

William J. Stanley
Roger Ray
Robert W. Newman
Robert W. Taft

Clinch River Breeder Reactor Proj.:

Lochlin W. Caffey
George C. Grisaffe
Donald A. Meyer

James L. Trowbridge (Small Purchases)
James E. Orasky

Grand Junction Office:

Ben Bowyer
William F. Archbold

Regional Office X, Seattle:

M. D. Shreckengost

Fast Flux Test Facility Project Office:

Robert D. Larson
Raymond J. Myjak
Gary C. McKinney
C. S. Carlisle

Daniel E. Crouter (Administration)
John M. Wileynski
Peter E. Rasmussen

Idaho Operations Office:

Lois Anderson
Charles Williams
Bell Fraser

Joe Marmo
Garry Anderson

Grand Forks Energy Technology Center:

Gordon H. Gronhovd
Norman A. Meeks

John R. Fleur (Small Purchases)

Laramie Energy Technology Center:

Richard Justice
Allan J. Montgomery

Albert A. Shepher (Small Purchases)

Bartlesville Energy Technology Center:

William C. Drake
Jo Martin Love

James L. Green
Kenneth J. Hughes

Schenectady Naval Reactors Office:

Thomas A. Bisnett
Peter F. Emmi
B. H. Erickson

Pittsburg Naval Reactors Office:

C. E. Gaddis
George B. Strasbaugh

Region I, Boston:

Louise S. Urgo
Leonard A. Sweeney

Region IV, Atlanta:

J. R. Rogers
Roy F. Pettit
Dan T. McCollister

Region IV, Dallas:

Curtis E. Carlson, Jr.
Marvin E. DeMoss
James R. Ross, Jr.
Thomas E. Jones
Donald W. Westmoreland

Region VII, Kansas City:

William H. Smith
Ronald J. Brown
F. Gilbert Lagergren

Region II, New York:

Robert A. Low
William A. Wood

Region VIII, Denver:

Have not implemented Contracting Officer Warrant Program as yet. In the process of bringing qualified personnel on board.

Naval Petroleum and Oil Shale Reserve in Colorado, Utah, and Wyoming:

Terrance T. Rubald
J. P. Watson

Naval Petroleum in California:

Kenneth W. Meeks
Roger G. Martin

ATTACHMENT 4
To Response to
Congressman Dingell's
Letter of Nov 9, 1979

PROCUREMENT AND ASSISTANCE ORIENTATION

FOR DOE PROJECT OFFICERS

Topic Outline

A. Objectives of the orientation session.

B. Overview of the DOE Procurement and Assistance Activity.

1. **Summary of DOE Award Activity.**
2. **Organization of the DOE Procurement Function.**
   - **a. Procurement office role in facilitating program objectives.**
   - **b. Headquarters/field office roles and relationships.**
   - **c. Role of Headquarters Program Support Office.**
3. **Procurement and Assistance Regulations.**
   - **a. Difference between procurement and assistance awards.**
   - **b. Regulations applicable to DOE Procurement contracts.**
   - **c. Regulations applicable to DOE Assistance Awards.**
   - **d. Similarities between procurement and assistance in terms of the solicitation and award process.**
4. **Flexibility of the Procurement and Assistance Regulations.**
   - **a. How the procurement and assistance process can serve program goals.**
   - **b. Problems in the award process can be prevented by:**
     - **(1) Defining the objective of the expenditure.**
     - **(2) Selecting the method of solicitation and type of award that is appropriate to the defined objective.**

C. Methods of Procurement and types of Award Instruments.

1. Negotiation versus formal advertising.

a. Formal advertising process.

(1) Criteria for formal advertising.

(2) Basis for selection and award.

(3) Type of award instrument.

b. Negotiation process.

(1) Criteria for negotiation.

(2) Solicitation and award process.

(3) Types of resulting award instruments.

2. Types of contracts and assistance instruments.

a. Characteristics of contract types.

(1) Firm fixed price.

(2) Cost reimbursement.

b. Characteristics of Assistance Awards.

(1) Grants.

(2) Cooperative agreements.

D. Procurement/Assistance leadtime.

1. Factors which influence leadtime.

2. Project officer actions which can reduce leadtime.

3. Steps in the process of solicitation, negotiation and award.

E. The roles of contracting officers and project officers in the solicitation and award process.

1. Contracting officer roles.

2. Project officer roles.

F. Technical evaluations by DOE project officers.

  1. Evaluation criteria considerations.

  2. Objective of the technical evaluation process.

  3. The evaluation and selection process.

  4. Technical evaluations of cost proposals.

    a. The significance of the technical evaluation of proposed cost.

    b. The items to be addressed in the technical evaluation of proposed cost.

G. Noncompetitive procurement.

  1. Benefits of competition and DOE philosophy.

  2. Legitimate bases for noncompetitive procurement.

  3. Noncompetitive justification content.

H. Unsolicited proposals.

  1. DOE philosophy on unsolicited proposals.

  2. Advance contact with offerors and abuse of the unsolicited proposal process.

  3. Justification for acceptance of unsolicited proposals.

I. Procurement request preparation.

  1. Components of the procurement request.

  2. The procurement plan.

    a. The significance of the procurement plan.

    b. Procurement plan contents.

  3. The Statement of Work.

    a. Purpose and significance in the solicitation and contract.

    b. Guidance for Statement of Work preparation.

J. Contract modification.

  1. Types of modifications.

    a. Increased scope.

    b. Changes under the "changes clause."

    c. Administrative modifications.

  2. Modification process and procedures.

  3. Roles of contracting officers and project officers in contract modification.

K. Responsibilities of the project officer.

  1. Preaward.

  2. Post award.

L. Support Service Contracts

  1. DOE Philosophy

  2. Applicable Management Directives

  3. Abuses of Support Service Contracting

M. Special topics.

  1. Preprocurement planning.

  2. Reporting Requirements.

  3. Contract Financing.

  4. Special DOE solicitation types.

    a. Program opportunity notice.

    b. Program research and development announcement.

    c. Notice of program interest.

  5. Precontract costs and letter contracts.

  6. Ratification of unauthorized commitments.

  7. Organizational conflict of interest.

PROCUREMENT ORIENTATION COURSE

FOR DOE PROJECT OFFICERS

Handout Materials

TYPES OF CONTRACTS AVAILABLE FOR USE BY DOE

There are numerous types of contracts which are used by the DOE. They fall generally into two broad types. The following is a description of these two general types of contracts, their characteristics, the types of transactions to which they are appropriate and a brief discussion of the variations which are possible within the general contract type.

1. Firm Fixed Price (FFP) Contracts.

This contract type provides for the payment of a fixed dollar amount upon delivery of a specific item or service. It would be used in a case in which the deliverable item could be described in a detailed design or performance specification or by reference to manufacturer's part number. It is generally suited to the purchase of supplies, materials, construction, "off-the-shelf" items, or services in which the unit of service is quantifiable. It generally permits or requires little if any technical guidance or in-process surveillance by the Government. The fixed price contract involves substantial risk to the contractor since the contractor will be reimbursed no more than the contract amount even though his cost of performance may exceed the contract amount.

2. Cost Reimbursement Contracts.

This type of contract involves an estimate of the cost of performance. It provides for the payment of the actual allowable cost incurred by the contract or subject to the stipulation that: the Government is not obligated to pay costs in excess of the estimated cost; the contractor is not obliged to incur costs in excess of the estimated cost. The estimated cost can be adjusted, upward or downward, to accommodate actual costs which differ from the initial estimate of cost.

The cost reimbursement contract type minimizes the risk of the contractor. This type of contract would only be used when the cost of performance cannot be estimated with sufficient certainty to permit use of fixed price contract. Research, developmental, study efforts, and complex long leadtime construction are examples of efforts that necessitate the use of cost reimbursement contracts.

The description of the contractor's obligation in a cost reimbursement contract would generally consist of an enumeration of tasks to be performed and objectives to be achieved. The Government has, in such a contract, the right as well as the responsibility to perform technical performance surveillance and cost/schedule surveillance and to give technical guidance and direction to the contractor.

There are several variations of cost reimbursement contracts in terms of the profit or fee associated with the contract. These include:

a. Cost shared contracts in which no fee is paid and in which the contractor bears a portion of the cost of performance. Cost sharing involves joint sponsorship of an effort in which there is mutual benefit to the Government and the contractor.

b. Cost only contracts with nonprofit deriving organizations such as educational institutions.

c. Cost plus fixed fee (CPFF) contracts in which the fee is established at the outset and does not vary as a result of costs actually incurred.

d. Cost plus incentive fee (CPIF) contracts in which the fee earned is a function of the contractor's success in meeting specific targets in terms of cost, schedule or technical performance.

e. Cost plus award fee (CPAF) contracts in which the fee earned is determined based on periodic subjective evaluations of the contractor's performance in connection with fee established performance criteria.

The table which follows as page 3 dipicts a range of contract types as a function of: the specificity with which work must be described; the extent of Government surveillance or guidance required.

RANGE OF CONTRACT TYPES

Firm Fixed Price	Fixed Price with escalation	Cost Reimbursement Completion Type CPFF CPAF Cost	Cost Reimbursement Level of Effort w/out Task Orders CPFF CPAF Cost	Cost Reimbursement Task Order Level of Effort CPFF CPAF COST

SPECIFICITY OF WORK DESCRIPTION

Detailed Design of performance specification	Detailed enumeration of tasks to be performed or objectives to be achieved	General description of work to be performed	General description of types of work for which task orders may be issued

EXTENT OF GOVERNMENT SURVEILLANCE AND GUIDANCE REQUIRED OR PERMITTED

Virtually none	-technical milestone surveillance -cost surveillance -general technical direction	-detailed performance surveillance -cost surveillance -more specific technical direction	-detailed performance surveillance -cost surveillance -each item of work detailed by written task orders

NONCOMPETITIVE JUSTIFICATION AND JUSTIFICATIONS FOR ACCEPTANCE OF UNSOLICITED PROPOSALS

The Federal Procurement Regulations and the statutes relating to the award of Federal Contracts and Assistance place significant emphasis on the need for competition in the expenditure of Federal funds. The DOE procurement regulations stipulate that awards shall be made competitively to maximum extent possible.

Competition in the award of Government contracts is, thus, viewed as the norm. Any DOE award which does not involve competition requires the preparation of a formal decision document which substantiates the basis for the decision not to secure competition. This decision document is required in the case of noncompetitive procurement initiated by DOE and in connection with the acceptance of unsolicited proposals, which are viewed as a special class of noncompetitive procurement.

The decision not to secure competition becomes a matter of official record and is subject to dispute, after the fact, by interested third parties and by the General Accounting Office (GAO).

There are two general situations in which the GAO has sanctioned the initiation of noncompetitive procurements by Government agencies. These are:

1. Situations in which only one firm is capable of providing a needed product or service consistent with schedules which cannot be relaxed.

2. Situations in which only one firm can provide a needed product or service of the type or quality required by the Government.

The GAO has been unsupportive of noncompetitive procurements which are based on speculation that a single firm has the capability of providing a product or service at a reasonable price. It is argued that such speculation should be proven through the competitive process. Similarly, the GAO has been critical of noncompetitive procurements which are based on the delays incident to competition when the requirement could have reasonably been anticipated so as to permit competition.

Noncompetitive awards resulting from proposals which were unsolicited (submitted at the sole initiative of the offeror) are deemed legitimate if the proposal offers unique or novel ideas, solutions, or approaches. The lack of competition in such instances is based on the principle of law that such unique ideas have property value which should not be violated. The right to accept such proposals without competition does not extend to situations in which:

1. The proposal offers the providing of products or services for which the Government could have anticipated a specific need.

2. The proposal offers the providing of a service which does not involve unique ideas and which would be the subject of a competitive solicitation.

3. The proposal was submitted at the request of a DOE employee.

The Justification for Noncompetitive Procurement or for the Acceptance of Unsolicited Proposals takes the form of a recommendation from the initiator to the contracting officer with concurrences and approvals as a function of the value of the award action. The required content of and the review and approval levels associated with Noncompetitive Justifications and Justifications for Acceptance of Unsolicited Proposals are identified on page 6 as follows.

Noncompetitive Justification

Application: All single source procurements over $500 not based on unsolicited proposal.

Regulation Citation: DOE-PR 9-3.805-51.

Content of Justification.

1. Brief Description of Supplies or Services to be purchased.
2. Procurement History, and Estimated Future Requirements.
   - Evolution of the action.
   - Continuation of ongoing effort.
   - Actions taken to secure competition.
3. Estimated Cost.
   - Estimated cost by FY.
   - Basis for costs estimate.
   - How cost would be affected by selection of another source.
4. Schedule Requirements.
   - Identification of any program schedule considerations which preclude competition.
   - Identification of why only the recommended source can meet schedules.
5. Exclusive Capabilities of the source recommended.
   - Unique qualifications of the personnel.
   - Unique prior experience of the firm.
   - Specialized facilities or test equipment.
   - Patents, copyrights, or proprietary data which precludes competition.
   - Other specialized capabilities of the recommended source which clearly make it the only one capable of performing the work consistent with schedule and without unreasonable costs.

Review and Approval Levels.

$ Value of Award	Concur	Approval
$500 - $1M	PROC Director or designee	Sr. Program official or designee
$1M - $5M	General Counsel, PROC Director or designee	Sr. Program official or designee
$1M - $50M	General Counsel, PROC Director or designee	Sr. Program official
Over $50M	General Counsel, PROC Director	Secretary, Under Secretary or Deputy Secretary

Justification for Acceptance of Unsolicited Proposals

(Other than Educational Institutions)

Application: All unsolicited proposals (including renewal proposals) except those from Educational Institutions and other not-for-profit institutions (such as research hospitals, charitable institutions, and local government authorities) operating under Special Research Contracts.

Regulation Citation:
DOE-PR 9-4.900 for Contracts
DOE-AR-10-600.34 for Grants & Cooperative Agreements

Contents of Justification.

1. **Evaluation Factors.**
   a. Unique, innovative or meritorious methods, approaches, or ideas which were originated by the offeror and are embodied in the proposal.
   b. Scientific, technical, or socioeconomic merit of the proposed effort.
   c. Contribution which the proposed effort is expected to make to the Department's specific mission.
   d. Capabilities, experience, facilities or techniques offered which are needed in achieving objectives.
   e. Qualifications, capabilities and experience of personnel which are needed in achieving objectives.

2. **Determinations** (to be supported by substantiating narrative).
   a. That the proposal was submitted solely at the proposers own initiative.
   b. (For Contracts)-That the proposal is to explore a method, approach or idea or carry out an initial development in support of DOE's mission which: (1) Does not duplicate work currently being performed or contemplated by DOE; and
   (2) Is not already known by DOE; or
   (3) Has merit or value not previously recognized.
   c. (For Financial Assistance)-The proposal is relevant to a public purpose of support or stimulation authorized by program legislation (refer to DOE-AR 10-600.34 for criteria).

Review and Approval Levels.

$ Value of Award	Concur	Approval
$500 - $1M	PROC Director or designee	Sr. Program official or designee
$1M - $5M	General Counsel, PROC Director or designee	Sr. Progra official or designee
$5M - $50M	General Counsel, PROC Director or designee	Sr. Program official
Over $50M	General Counsel, PROC Director	Secretary, Under Secretary or Deputy Secretary

Unsolicited Proposals From Educational Institutions

(and certain not-for-profit organizations)

Application: Unsolicited proposals from Educational Institutions (and not-for-profit organizations) when the proposal is to result in award or renewal of a Special Research Contract (SRC).

Regulation Citation: DOE-PR 9-4.5100.

Procedural Differences from Regulations Applicable to Proposals from Profit Making Organizations.

1. **Documentation of Decision to Accept Proposal.**

   No specific format is required by DOE-PR 9-4.5100 for approval of the decision to accept a University proposal.

2. **Approvals and Concurrences.**

   Headquarters Senior Program Officials (or their designees) are responsible for selecting and approving unsolicited University proposals. DOE-PR 9-4.5100 does not require any concurrences in such approvals.

   Letter notification of the decision to accept or reject a proposal is to be made by the Program Office which reviews the proposal. In the event of approval, the letter shall: advise that the proposal has been accepted subject to completion of satisfactory contract; identify the DOE Procurement Office that will negotiate and execute the contract; and stipulate that DOE assumes no obligation until a contract has been executed. A copy of the approval letter shall accompany the Procurement Request Form which is transmitted to the Procurement Office.

PROCUREMENT LEADTIME

Procurement leadtime is a term which describes the interval from receipt by a procurement office of a complete procurement request until award of a contract. The amount of time necessary for the award of a Government contract varies as a function of factors such as:

1. The dollar value of the action.

2. The extent of competition.

3. The complexity of the transaction.

4. The existing workload of the procurement office.

DOE Project Officers are participants in the award process from the initial definition of a requirement through the negotiation and award of the contract. As such, there are a number of steps which can be taken by Project Officers to reduce the interval between receipt of a procurement request and award of a contract. These include:

1. Communication with the Contracting Officer in advance of procurement request preparation.

2. Care in definition of the requirement and preparation of Work Statements.

3. Preparation of a Procurement Plan which provides the Contracting Officer with all information needed for solicitation and award.

4. Early Fiscal Year initiation of procurements.

5. Planning the aggregation of like requirements and effective use of multiyear contracts.

6. Expeditious evaluation of proposals.

The two charts which appear as pages 10 and 11 depict typical leadtimes for competitive and noncompetitive procurements under $5 million in award value. The major events during the award process and the actions which must occur between these events are identified.

LEADTIME FOR CONTRACT AWARD

- Noncompetitive Procurements under $5M

Calendar Days from P.R. Receipt	Events	Days Between Events	Actions Required
0	Receipt of Procurement Request		
		20	- Synopsis - RFP preparation - RFP review and approval
20	Solicitation Issued		
		30	- Preparation of Proposal by Contractor
50	Receipt of Proposal		
		20	- Evaluation of Technical Proposal - Technical Evaluation of Cost Proposal - Cost Analysis and Audit - Proposal revision (if necessary)
70	Begin Negotiations		
		20	- Clarification of Proposal - Discussion of Contract Terms and Work Statement - Agreement on Contract Amount
90	Negotiations Concluded and Agreement Reached		
		17	- Contract Preparation - Legal and other reviews - Contract Reproduction
117	Contract mailed for signature		
		13	- Review of Contract by Contractor - Signature by Contractor and return to Contracting Officer
130	Award of Contract		

LEADTIME FOR CONTRACT AWARD

- Competitive Procurements under $5M

Calendar Days from P.R. Receipt	Events	Days Between Events	Actions Required
0	Receipt of Procurement Request		
		25	- Synopsis - RFP preparation - RFP review and approval
25	Solicitation Issued		
		35	- Preproposal Conference (if any) - Preparation of Proposals by Offerors
60	Proposals Received		
		30	- Evaluation of Technical Proposals - Establish Competitive Range - Discussions with offerors in Competitive Range - Preparation and Submission of Final Offers - Evaluate Final Offers and Select Contractor - Evaluation of Cost Proposal - Cost Analysis and Audit
90	Begin Negotiation with Contractor Selected		
		30	- Discussion of Contract Terms and Work Statement - Negotiation of Contract Amount
120	Negotiations Concluded and Agreement Reached		
		17	- Contract Preparation - Legal and other reviews - Contract Reproduction
137	Contract Mailed for Signature		
		13	- Review of Contract by Contractor - Signature by Contractor and return to Contracting Officer
150	Award of Contract		

PREPARATION OF TECHNICAL EVALUATION CRITERIA

AND CONDUCT OF TECHNICAL EVALUATIONS

A. Consideration in Preparation of Technical Evaluation Criteria.

Evaluation criteria are the measurement standards to be applied consistently and uniformly in assessing the merits of each proposal submitted in response to a DOE Request for Proposals. The criteria are included in the solicitation to provide proposers with an understanding as to what is considered most important in order that they may prepare successful offers. Proposers have the right to expect that their proposals will be scored using only those criteria stated in the solicitation and no others. It is extremely important, therefore, that the development of these criteria be tailored carefully to reflect a consideration of what is required by the solicitation as a technical proposal and the way in which resulting submissions will be evaluated.

In developing technical evaluation criteria consider the following:

1. The evaluation criteria serve as the standard against which the proposals will be measured. The evaluation criteria will be used to determine which proposals are technically unacceptable and not worthy of further consideration and which proposals are acceptable or capable of being upgraded to an acceptable level.
2. Offerors should be able to understand from the stated criteria and relative weightings not only how they will be evaluated, but what their expected scores will be, based on their own independent assessment. Remember that this assessment may be the basis for a decision to propose or not to propose on the requirements expressed in a solicitation.
3. Criteria and weightings should be developed on a case-by-case basis, with each criterion having a demonstrable and important relationship to the salient features of the procurement as reflected in the Statement of Work.
4. The evaluation criteria are a measurement device. The criteria and their relative weightings should be tailored to the requirement to which proposers are expected to respond. The criteria will influence the nature of the information provided in proposals. They should be a clear and unambiguous statement of the factors which the Government deems important in contractor selection.

B. Conduct of the Technical Evaluation.

Upon receipt of proposals the Contracting Officer will provide copies of the technical proposals to the proposal evaluators. Cost and/or business proposals will be retained for evaluation by the Contracting Officer or assigned business evaluation panel.

Initial reviews of the technical proposals are conducted to screen out those which are so nonresponsive to the requirement as to remove them from further consideration. Examples of such deficiencies are the offer of an approach previously found unworkable or the offer of an effort which is inconsistent with the stated objectives of the solicitation.

Following the initial review for responsiveness, each responsive proposal will be evaluated in accordance with the evaluation criteria and scoring plan included in the solicitation. It is extremely important that all evaluations be based on these common criteria. The imposition of different or additional criteria will render the evaluation process defective and subject the resultant award to protest by unsuccessful offerors.

The resulting technical evaluation will identify proposals which are: acceptable; capable of being upgraded to an acceptable level through negotiation; or totally unacceptable. The written evaluation will normally include:

1. A scoring matrix identifying the numerical score achieved by each proposal on each evaluation criteria element.
2. A narrative section which identifies the deficiencies, weaknesses, or superior features of each proposal with respect to the stated evaluation criteria elements.

CONTENTS OF THE PROCUREMENT OR ASSISTANCE PLAN

A procurement request and associated documents communicate to the Contracting Officer information needed in the preparation of the solicitation, the conduct of negotiations, and the award of the procurement or assistance instrument. There are many items of information which if not communicated will result in problems and or delays in the award process. It is, for example, necessary that the Project Officer identify the type of contract or award instrument deemed appropriate to the requirement. The Contracting Officer will require, for purposes of negotiation, instructions concerning any special terms or conditions which the initiator wants included in the award instrument. Such instruction might involve reporting requirements, patent or data rights, access to Government property or data during performance, the needed award schedule, lists of recommended sonrces, or the need for proposal conferences with potential offerors.

The information which the Contracting Officer requires to adequately serve program objectives should be communicated in writing as part of the procurement request. Project Officers will find it helpful to provide such information in the form of a Procurement or Assistance Plan which accompanies the procurement request.

Attached as pages 15 through 16 is an outline of a Procurement or Assistance Plan which may be used in the preparation of requirement documents. The items identified in this outline should be addressed in the Procurement or Assistance Plan to the extent applicable.

Procurement/Assistance Plan Contents

1. **Brief Description of Work to be Performed.**

   - A one paragraph summary, suitable for use in Commerce Business Daily synopsis.

2. **Estimated Period of Performance.**

   - Desired award date.

   - Performance period in months.

   - Any interim performance milestones to be included in award instruments.

3. **Estimated Cost.**

   - Total estimated cost of the work to be performed.

   - Explanation of basis for Government estimate.

   - An evaluation of the reasonableness of the elements of proposed cost (if an unsolicited proposal has been received and accompanies the procurement request).

   - If contract is to be funded in increments, the estimated costs per FY.

4. **Type of Contract or Assistance Award Recommended.**

5. **Responsible Technical Officer.**

   - Name, Mailing Address and Telephone Number of the DOE Project Officer who will be responsible for monitoring technical performance.

6. **Statement of Work.**

   - Include as an attachment.

7. **Reporting Requirements.**

   - Include reporting requirements checklist and distribution sheet as attachment in accordance with DOE Uniform Contracts Reporting Guidelines (UCRG).

   - Identify any special deliverable data required.

8. **Suggested Sources.**

   - Competitive Actions.

     - Attach a list of names and addresses of suggested sources.

   - Noncompetitive Actions.

     - Identify the name and address of the suggested source.

     - Attach approved Noncompetitive Justification or Justification for Acceptance of Unsolicited Proposal (as appropriate).

9. **Evaluation Criteria** (competitive actions only).

   - Attach proposed technical evaluation criteria.

   - Identify the proposed scoring weights for the criteria elements.

10. **Government Property, Data, or Facilities.**

    - Identify the type and quantity Government-furnished property, data, or facilities, if any, that the awardee will require for performance of the effort.

    - Indicate the schedule of availability of such property or facilities.

    - Disposition instructions for any property which the awardee is expected to acquire at Government expense under the contract.

    - The planned schedule of availability of such property or facilities.

11. **Special Instructions.**

    - Include any special instructions or additional information which the Contracts Office might need in preparing the solicitation or award instrument.

    Examples:

    - Special security or clearance requirements.
    - Special instructions on structuring of cost or technical proposals.
    - Prequalification criteria.
    - Special conflict of interest considerations.
    - Special data requirements.
    - Special patent considerations.
    - Need for preproposal conference.

PREPARATION OF STATEMENT OF WORK (SOW)

The Statement of Work serves two separate and very important purposes in a negotiated procurement. In the solicitation it communicates to potential proposers the nature of the Government requirement. In the award instrument it constitutes the definition of the awardee's performance obligation.

Because of the purposes served by the Statement of Work, it is perhaps the most important document in a negotiated procurement.

A Statement of Work which is clearly written will allow proposers to understand the Government requirement and respond with detailed plans and approaches for accomplishment of the tasks specified. A well written Statement of Work will allow proposers to make reasonable estimates of the resources which will be required to satisfy the Government's requirement. Poorly written Statements of Work are misleading to proposers and present a poor image of the Department to the Industrial and University community. When the Government's requirement is not clearly identified, the award process is delayed by the need for lengthy negotiations to clarify the requirement.

The Statement of Work should clearly define the performance obligation of the awardee. Numerous problems are created by Statements of Work which do not meet this criteria. These problems include: wasted expenditures for work not desired by the Government; disputes between the parties concerning what constitutes satisfaction of the performance milestones; and disagreements about the methodology to be employed in performing the work.

Statements of Work vary from simple statements of objectives to complex statements of performance requirements. Regardless of their simplicity or complexity, certain general principles apply to all of them. First, they must be neither so narrow as to restrict the contractor's efforts nor so broad as to permit the contractor to explore areas having little relationship to the particular work. Second, they must define the contractor's obligations and should be definitive enough to protect the Government's interests. Finally, a contractor taking ultimate direction from the SOW alone should be able to perform the required work.

Examples of common deficiencies in Statements of Work include:

1. Lack of appropriate specificity in the description of the tasks to be performed.

2. Failure to identify the objectives or technical problem toward which the efforts are to be directed.

3. Inconsistent and/or conflicting use of terminology.

4. Use of abstract phrases which do not impose binding obligations.

5. Performance obligations which are dependent on actions of third parties, not party to the award.

6. Failure to clearly distinguish the relative responsibilities of the Government and the awardee.

Disputes concerning contract performance will be arbitrated by third parties. For this reason, the Statement of Work should be written for reading by an independent third party. A few examples of techniques which aid in third party understanding of the Statement of Work are:

1. Consistent use of a term. It is confusing if terms such as "data collection," "field sampling," and "surveys" are used interchangeably. The same word or phrase should be used consistently to convey the same meaning.

2. Mandatory and permissive language should be used properly. Whenever a binding provision is to be expressed, use the word "shall" rather than "may," "will," or "should."

3. Abbreviations should be used only after first being defined.

4. Define who is responsible. The term "samples shall be selected for analysis" raises the question, selected by whom—the Contractor or the Government.

5. Use short sentences with simple and concise language.

6. When preparing Statements of Work for contract modifications or follow-on contracts, remember that each Statement of Work must be able to stand alone as an expression of the Contractor's obligation.

Attached as pages 19 and 20 is a checklist which may be helpful in the preparation of and in the evaluation of the adequacy of Statements of Work. It is suggested that DOE Project Officers review this checklist in connection with each Statement of Work they prepare.

Checklist for Statement of Work Preparation

A. Prepreparation Analysis.

1. What is the objective of the work to be performed?

2. What is the nature of the work to be performed?

3. What methods will be used in performing the work?

4. What background information and/or data will be needed by potential proposers?

5. How will satisfactory completion of the work be determined?

6. Are there any performance objectives to which performance incentives should be applied?

7. Can the work be performed in sequential phases? If so, would phasing of the work be logical?

B. Contents.

1. Have the following been included, as appropriate?

   (a) Relevant background information or data which would be needed to understand the requirement and prepare an acceptable proposal (these should be as attachments to rather than incorporated in the Statement of Work).

   (b) A Statement of the overall objectives to be achieved or the technical problem to be solved.

   (c) A clear description of the specific tasks to be performed by the contractor.

2. Is the description of the tasks sufficiently specific to permit the manpower resources, equipment, special facilities, subcontracts, or other necessary costs of performance to be estimated with reasonable certainty?

3. Has the Statement of Work been developed to facilitate the estimate of costs by task or phase of work?

4. Is the work described so as to permit an independent third party to determine whether or not the contractor has satisfied his contract obligation?

5. Have conflicting Statements and ambiguous phaseology been eliminated? (Avoid such words as "about," "nearly," "etc.," and "approximately."

If variation from a performance requirement is permissible, state the tolerance.)

6. Is consistent use made of terminology? (The same word or phrase should be used whenever the same meaning is to be conveyed.)

7. If the contract is for the initial phase of a multiple phase effort, will the data to be delivered be sufficient to permit competition in subsequent phases?

8. If the Contractor is to furnish designs, drawings or specifications, have the desired form, content and level of detail been specified?

9. If the Contractor is to develop, fabricate, or test hardware:

(a) Have applicable specifications been included in end item descriptions?

(b) Have possible conflicts between design and performance specifications been eliminated?

(c) Are testing methods and procedures clearly described?

ATTACHMENT 5

Response to Mr. Dingel's letter of November 13, 1979, to Mr. Tashjian, on specific issues in the GAO Report.

Mr. Dingell in his letter to Mr. Tashjian requested certain information on procurement staffing, decentralization of procurement activity, and contract close outs be provided with the submission of the Department's comments on the GAO report.

Attached is the requested information.

EXHIBIT I

In connection with the Department's reply to our letter to Secretary Duncan, please provide the "several analysis of procurement staffing" referred to on page 13 of the GAO report and indicate why "no final staffing decision has been made."

Enclosed are copies of the Headquarters Procurement Operations staffing analysis that has been accomplished since FY'77. NASA in June 1977, completed a study to search for a productivity measurement system to arrive at a viable manpower guideline procedure. The NASA-developed system was used by the Office of Procurement Operations as a gauge against its work load for FY'77 and '78 (Enclosure A & B). The use of the NASA guide revealed that in FY'77, 103.6 personnel were required to accomplish the work load versus an actual authorized strength of 86. In FY'78, through August 31, 1978 the same NASA guide revealed a personnel requirement of 163.2 personnel versus an authorized strength of 101. In addition, an analysis was accomplished for the FY'78 work load as compared to NASA field centers that were felt to be relatively associated with similar work (Enclosure C).

The current staffing level generally allows Operations to satisfy programmatic requirements for the award of contracts and other instruments. However the procurement administrative lead time and contract administration including financial administration of contracts continue not to receive the degree of attention warranted. The current manning level continues to utilize resources predominantly in the award of procurement instruments at the expense of contract administration activities.

Fiscal Year 79 required an increased level of performance over FY'78 but with a net reduction of 5 permanent positions over FY'78. Due to the current staffing level, it is anticipated that contract administration and financial performance will not reach the desired level of performance. New requirements placed on Operations has further impacted its staff, such as the Small Business Act revisions, work order contracts, FOI/congressionals, and organization conflict of interest.

The staffing decision has been made to Procurement Operations staff at the level of 96 positions for FY 1980, subject to any supplemental appropriation increases.

PROCUREMENT OPERATIONS MANNING GUIDELINES-FY77 09/11/78

A. PROCUREMENT SPECIALISTS (OPERATIONAL)

		Number of Actions	Rate	Man-Years
Contractual Activity				
Pre-Award Phase Workload:				
$0-$100,00	C	82	.0280	2.296
	NC	210	.0190	3.990
$100,000-$1 MILLION	C	82	.0680	5.576
	NC	113	.0460	5.198
$1 MILLION-$5 MILLION	C	31	.4740	14.694
	NC	10	.2440	2.440
$5 MILLION-$10 MILLION	C	2	.7180	1.436
	NC	2	.3700	.740
OVER $10 MILLION	C	6		3.000
	NC	3		1.500
CONTRACT ADMINISTRATION PHASE WORKLOAD:				
$0-$100,000		815	.0120	9.780
$100,000-$1 MILLION		310	.0250	7.750
$1 MILLION-$5 MILLION		85	.1520	12.920
$5 MILLION-$10 MILLION		11	.1980	2.178
OVER $10 MILLION		12		3.000
GRANTS WORKLOAD			.0080	0.
SMALL PURCHASES/PURCH ORDERS WORKLOAD		4,856	.0007	3.399
TOTAL PROCUREMENT SPECIALISTS (OPERATIONAL)				79.897

B. ADMINISTRACTVE PERSONNEL

	Procurement Specialists	Rate	Man-Years
SUPERVISORY/ADMINISTRATIVE PERSONNEL	15	.5000	7.5
CLERICAL	13	.4800	6.24
TOTAL ADMINISTRATIVE PERSONNEL	28		13.74

C. COST/PRICE ANALYST	10
TOTAL	103.6

PROCUREMENT OPERATIONS MANNING GUIDELINES- FY 78 09/06/78

A. PROCUREMENT SPECIALISTS (OPERATIONAL)- THROUGH 8-31-78

		NUMBER OF ACTIONS	RATE	MAN-YEARS
CONTRACTUAL ACTIVITY				
PRE-AWARD PHASE WORKLOAD:				
$0-$100,000	C	180	.0280	5.040
	NC	409	.0190	7.771
$100,000-$1 MILLION	C	1	.0880	.088
	NC	1	.0440	.044
$1 MILLION-$5 MILLION	C	58	.4740	27.492
	NC	51	.2440	12.444
$5 MILLION-$10 MILLION	C	16	.7100	11.400
	NC	9	.3700	3.330
OVER $10 MILLION	C	14		7.00
	NC	11		5.50
CONTRACT ADMINISTRATION PHASE WORKLOAD:				
$0-$100,000		1857	.0120	22.284
$100,000-$1 MILLION			.0250	0.
$1 MILLION-$5 MILLION		150	.1520	22.800
$5 MILLION-$10 MILLION		31	.1980	6.138
OVER $10 MILLION		44		
GRANTS WORKLOAD		217	.0080	1.736
SMALL PURCHASES/PURCH ORDERS WORKLOAD		6230	.0007	4.361
TOTAL PROCUREMENT SPECIALISTS (OPERATIONAL)				137.498

B. ADMINISTRATIVE PERSONNEL

	PROCUREMENT SPECIALISTS	RATE	MAN-YEARS
SUPERVISORY/ADMINISTRATIVE PERSONNEL	15	.5000	7.5
CLERICAL	13	.4800	6.24
TOTAL ADMINISTRATIVE PERSONNEL			
TOTAL Supervisory/Clerical			13.74

C. COST/PRICE ANALYST			12.0
	TOTAL		163.23

BACKUP

COMPARISON WITH NASA'S MAJOR PROCUREMENT ACTIVITIES

(EXCLUDING SMALL PURCHASES)

(FY - 78)

	ACTIONS	$	STAFF
DOE - PROCUREMENT OPERATIONS (MILLIONS)	3,549	1,214	101
NASA'S PRINCIPAL OFFICES (MILLIONS)			
GODDARD	3,000	596	197
JOHNSON	1,590	1,016	157
KENNEDY	1,247	298	132
MARSHALL	1,862	659	169

EXHIBIT 2

Please explain what procurement activities have been moved or planned to be moved into the regions as a part of decentralization and why such moves are expected to diminish pressures on Headquarter's procurement staff.

The following Program/Projects previously utilizing Headquarter's procurement staff services have been relocated to field operating offices:

- Strategic Petroleum Reserve - New Orleans
- Low Head Hydro - Idaho Operations
- Centrifuge Enrichment - Oak Ridge Operations
- Ocean TEC - San Francisco Operations
- 10 MW Solar Energy Project - San Francisco Operations
- Solar Total Energy Project - Albuquerque Operations
- Schools/Hospital Grant Programs - Regional Offices
- Weatherization Grant Programs - Regional Offices

To handle the additional workload resulting from decentralization, Headquarters positions have been transferred to the field and additional field positions obtained from OMB.

In conjunction with the decentralization of Fossil Energy Program/Project activities, the Under Secretary in April 1979 approved lead missions assignment for the Energy Technology Centers. These assignments designated the energy technology centers as the program execution offices for base technology activities (below pilot plant size) within their particular technology areas. This work, for the most part being done now at Headquarters, will be decentralized to the various ETC's. Over 100 contracts are or have been transferred from Headquarters to the etc's. In addition, a concerted effort is being made to transfer major projects (those of the pilot plant stage or larger) to various operations offices.

The lead technology assignments are as follows:

BARTLESVILLE ENERGY TECHNOLOGY CENTER (BETC)

Enchanced Oil Recovery

Western Tight Tar Sands

Internal Combustion Engines

GRAND FORKS ENERGY TECHNOLOGY CENTER (GFETC)

Applications for Low-Rank Coals

LARAMIE ENERGY TECHNOLOGY CENTER (LETC)

Oil Shale

Tar Sands

Underground Coal Gasification

MORGANTOWN ENERGY TECHNOLOGY CENTER (METC)

Gas Stream Clean-Up

Eastern Gas Shales

Fluidized Bed Combustion

Coal Gasification

Coal Feeding Systems

PITTSBURGH ENERGY TECHNOLOGY CENTER (PETC)

Coal Liquefaction

MHD Combustion

Synthetic Fuels Characterization

Coal-Oil Mixtures

Director Combustion Phenomena

The workload in the headquarters operations office has steadily grown during the past two years. While the decentralization of this work has some impact, the overall ratio of work to billets has not improved but instead has deteriorated. For example in October of 1977 when DOE was formed 6 billets were lost to this office due to a freeze that in essence established ceilings based on the number of people on board. As you can see this type of cut did not take into consideration any impact of current, future or increasing workload. This occurred after ERDA had already experienced a reduction in force in FY'77 and FEA had not received the increased number of billets it had justified based on new programs started there. Then in FY'79 another reduction of 5 billets occurred as a result of Departmental cuts.

EXHIBIT 3

When did you hire a contractor to "collect, organize, and send" contract data to the DCAS concerning close outs and when will the contract expire? Who is the contractor? What is the cost of the contract? Was the contract awarded competitively? Is not this a management function that is to be performed in-house and not by outside contractors under OMB directives and DOE orders?

On February 9, 1979, DOE entered into a contractual arrangement with Sterling Systems, Inc., Washington, D. C. for the performance of administrative support in the area of contract administration, for DOE's Office of Procurement Operations. The contract price is $242,457, and the period of performance is for one year ending February 8, 1980. Sterling Systems is a minority-owned and operated firm, and is certified as such under the Small Business Administration's (SBA) 8(a) Program. Accordingly, the prime contract is with SBA, who, in turn, subcontracts the work to Sterling Systems. Contracts under SBA's 8 (a) Program are exempt from competition, and this contract was therefore not awarded competitively.

Sterling Systems has not performed any management functions under this contract. All policies and decisions regarding all aspects of the contract close out effort, including delegation of expired contracts to DCAS for close out assistance, have been developed by DOE procurement employees. Sterling System's close out responsibilties consist solely of organizing and mailing contract information, and related "paper processing" activities.

During FY'78, DOE's first year of existence, it was recognized that a special effort would be required to close out the large number of expired contracts inherited from DOE's predecessor agencies. Accordingly, an agreement was entered into with Defense Contract Administration Service (DCAS) whereby DCAS would perform many of the contract close out functions for DOE. As a result of the above mentioned contract was awarded, in February 1979, for the performance of varous "administrative support activities" to enable DOE to transmit the contracts to DCAS for close out at the earlies possible date.

DOE had just begun the process of delegating the expired contracts to DCAS and focusing efforts toward close out of these contracts when GAO conducted its audit. Nevertheless, since DOE began its dedicated close out effort, over 800 contracts have been closed out, and action has been initiated to close out the remaining expired contracts.

It should also be clearly understood that this problem existed only in the headquarters where the bulk of the contracts in the Department exist, and where the culmination of different agencies into a single, DOE had the greatest impact. Reviewers of the field organizations indicate that contract close outs are not a significant problem department wide.

EXHIBIT 4

What actions have been taken to prevent close out delays in the future?

As the GAO report indicates, DOE has been relying on other Govnernment activities, e.g., DCAS, DCAA, etc., to assist in performing contract administration, which has included contract close outs. Contract close out is a normal contract administration function, which is regularly performed after contract completion. Accordingly, in the future such close out actions will be performed in the normal course of business, thereby alleviating the type of inventory build-up currently being experienced. In the interim, our efforts will continue to complete, as quickly as practicable, the close out of all physically completed contracts on hand.

In Headquarters the policy is that the postaward administration of contracts through close out be delegated, at award, to agencies with which DOE has on-going agreements for such purposes. DOE has such agreement with the Office of Naval Research (ONR) for contracts and grants with educational institutions, and with Defense Contract Administration Services (DCAS) for all other contracts (except grants). DOE also has a conditional agreement with the Corps of Engineers (COE) for construction contracts and architect and engineering contracts on a case-by-case basis. Except for interagency agreements; grants to other than educational institutions; construction and architect and engineering contracts declined by COE; and contracts determined to be sensitive by the cognizant Director of the Execution Division. All contracts are delegated, (excluding C. O. Authority) to ONR, DCAS, or COE for postaward administration through close out.

Contracts specifically excepted above are retained in-house for postaward administration through close out. Quarterly inquiries into the Integrated Procurement Management Information System (IPMIS) determine which contracts are due to expire within the ensuing 90 day period, whereupon computer generated memos for all such contracts are dispatched to the cognizant contracting officers for certification that no contractual action beyond the contract expiration date is contemplated, so that close out action can be initiated on a timely basis.

An automated control system for postaward administration has been developed and is being implemented that will track the administrative status of contracts through retirement, whether delegated or retained in-house.

GAO'S EVALUATION OF DOE'S COMMENTS ON GAO'S NOVEMBER 2, 1979, REPORT ON "THE DEPARTMENT OF ENERGY'S PRACTICES FOR AWARDING AND ADMINISTERING CONTRACTS NEED TO BE IMPROVED"

(EMD-80-2, November 2, 1979)

On January 14, 1980, the Secretary of Energy responded to our November 2, 1979, report entitled "The Department of Energy's Practices for Awarding and Administering Contracts Need to be Improved" (EMD-80-2) at the request of the Chairman, Subcommittee on Energy and Power, House Committee on Interstate and Foreign Commerce. On November 13, 1979, the Chairman requested our review and comments on that response.

In his response, the Secretary of Energy expressed concern with a number of issues raised in the report but nevertheless agreed to take corrective actions. He further stated that efforts have been underway for some time in the Department to increase competition, limit the incidence of informal commitments, and improve performance in the area of contract administration and closeout.

We are somewhat perplexed, however, by the detailed comments which were attached to the Secretary's letter. There seems to be a dichotomy between the Secretary's letter and the attachment. The attachment conveys a very negative tone toward our report and attempts to refute many of our findings. The Department points out that the depth of our examination and the findings presented are not sufficient to warrant the conclusions drawn.

We disagree, and find that many of the comments contained in the attachment do not address the issues raised in the report and conflict with the information obtained during our work.

Our evaluation of the Department's comments is presented below.

NONCOMPETITIVE PROCUREMENTS

We found, using Federal and Department of Energy procurement regulations as criteria, that 29 of the 38 noncompetitive contracts reviewed did not contain statements of fact from which can logically be concluded that the vendor selected is the only source of supply. The Department commented that the report did not provide persuasive evidence to document that other suppliers were available.

The first example questioned by the Department involved work related to the preparation of a gasoline rationing plan. As stated in our report, the Department received a Freedom of Information Act request to see the request for proposal. We contacted a representative of the firm making the request and were informed that it had the ability to perform the required work and was interested in doing so, but was not invited to bid. The Department justified the noncompetitive award based on a study to determine availability of qualified contractors. The study referred to was a telephone survey conducted by another of the Department's contractors. The results of the "study" were never documented, however.

The Department also questioned an example in our report concerning five firms that requested copies of a request for proposal. The Department stated that because a firm expresses an interest in a procurement action does not necessarily mean it has the capability to do the work. We agree with the Department that merely expressing an interest in a request for proposal does not necessarily mean a firm is capable of performing the work. We found no evidence, however, that the Department determined that the five firms did not have that capability. As previously indicated, both Federal and Department regulations state that the justification for a noncompetitive procurement must be more than a statement that only one firm is capable; it must be a statement of facts from which it has been concluded that the vendor is the only source of supply. None of the 29 contracts cited in our report were so justified.

INFORMAL COMMITMENTS

The Department believes that its procurement regulations and written policies authorizing only contracting officers to ratify informal commitments are adequate. To insure implementation, however, the Department plans to issue an internal memorandum to emphasize the importance of eliminating such commitments. Also, the Department has stated that it is in the process of raising the level of approval for ratifying such actions.

We believe that the Department's proposed action of issuing such an internal memorandum to all program and project officials to may have some benefit. However, we also believe that because similar action has been somewhat ineffective in the past, additional action will be needed if such commitments are to be eliminated. Such action could be in the form of disciplining program personnel who initially make informal commitments. Once an informal commitment has been made, the Department has little choice but to ratify such a commitment since the contractor is probably entitled to payment for work performed which will benefit the Government. The Department's ratification practices are currently under review by our General Counsel.

TASK ORDER CONTRACTS

The Secretary of Energy stated that it would be inappropriate to discontinue the use of "task order" contracts. (The Department's detailed comments refers to these as task assignment contracts, and hence these terms are used interchangeably in our discussion.) The Secretary also stated that it is imperative to the Department's mission that certain support services provided under "task order" contracts continue to be available. The Department's detailed comments stated that our report failed to convey the situation in which task assignment contracting arises, what it accomplishes, and what it prevents. The Department stated that the use of task assignment contracts enhances the opportunity for competition, but agreed that to the extent task assignment contracts may be overused, it would assure that responsible personnel are alert to the use of alternative methods which may offer improvement and more control.

In a legal opinion dated February 15, 1980, we stated that although there is nothing inherently illegal in the use of task order contracts, the broad statements of work contained in the initial solicitation can make meaningful competition difficult and may not insure that the Department ultimately obtains acceptable products at the lowest possible price. That legal opinion also stated that task order contracts have the potential to maximize costs to the Government. The legal opinion pointed out that the Department has conceded that this form of contracting is recognized as imposing few risks and little incentive on the contractor.

In addition to the above general comments, the Department cited the following specific concerns.

1. The Department stated that our report does not make sufficiently clear that competition has occurred at the award of a task assignment contract, except in the case of a few contracts awarded sole-source. We believe the report is clear on this matter. On page 5 the report states, "Task order contracts are usually

awarded competitively with a general statement of work." In addition, on page 6 the report states, "While task order contracts may be initially awarded competitively, we believe general work statements, * * * make fair and meaningful competition difficult and may not assure that DOE obtains acceptable products at the lowest possible costs."

2. The Department stated that it does not agree that general work statements make fair and meaningful competition difficult and may not assure that the Department obtains acceptable products at the lowest possible price. We continue to believe that broad statements of work make meaningful competition difficult and may not assure that acceptable products are obtained at the lowest possible price. This was reaffirmed in our February 1980 legal opinion. We would further point out that an attachment to the Department's detailed comments (Attachment 4, page 22) addresses statements of work to be contained in solicitations. This attachment, which is part of the Department's Procurement Orientation Course, states that the statement of work should clearly define the performance obligation of the awardee. It

goes on to say that numerous problems are created by statements of work which do not meet this criterion including (1) wasted expenditures for work not desired by the Government, (2) disputes between the parties concerning what constitutes satisfaction of the performance milestones, and (3) disagreement about the methodology to be employed in performing the work. The attachment further says that a statement of work which is clearly written will allow proposers to understand the Government requirement and respond with detailed plans and approaches for accomplishment of the work specified. It is the last statement which we believe directly addresses the issue. Meaningful competition cannot exist unless the competing firms can respond by stating their specific costs and capabilities related to specific and detailed descriptions of the work to be performed.

3. The Department stated that our report ignores the fact that task assignments are used in nearly all other Federal agencies. We agree that our report did not discuss the use of task orders by other agencies. As mentioned in the report, at the time it was issued the use of task orders from a legal standpoint

was under review. We fail to see what purpose might have been served by discussing use of task orders in other Federal agencies until their legality was determined.

4. The Department stated that "piggy back" funding is used as an administrative convenience to reduce the number of contractual documents required. Piggy backing is a method of funding which occurs when a task order contract is awarded for work for one program office, but that program office does not intend to commit funds for the entire contract amount. Tasks may be assigned subsequently from other program offices and funds from the other program offices transferred to cover the estimated cost of the task. This practice, like all task order contracts, tends to avoid competition in all but the original contract. At the time of our report, the use of piggy back contracts had become a matter of practice by one program office. This program office had contracts awarded with an aggregated maximum funding of approximately twice their actual budget. Program officials explained that this was done in anticipation that other offices would fund the portions of the contracts not funded by the originating program office. Also,

procurement officials told us that if the remainder is not funded, they will have to renegotiate the contract to reduce its face value. While a risk of renegotiation exists with all contracts due to initial estimates being in error, the practice of initially overestimating contract amounts increases the risk of renegotiation.

QUICK-REACTION WORK-ORDER MASTER CONTRACTS

The Secretary of Energy's January 14, 1980, response stated that the acquisition of services under quick-reaction work-order master contracts does not violate any Federal procurement regulation and is in fact completely consistent with the letter and spirit of applicable laws and regulations. Nevertheless, he stated that the Department would limit the award of this type of contract to the greatest extent possible. Our February 15, 1980, legal opinion concluded that this type of contract is legal; however, it pointed out that the Department should modify its use to achieve a greater degree of competition as contemplated by procurement statutes and regulations.

In addition to the Secretary's overall comment, the Department offered the following specific comments.

The Department indicated that the report did not recognize that Department officials initiated a legal review of quick-reaction work-order master contracts. It is our opinion, however, that these discussions were an outgrowth of our review, and we saw no reason to mention it in the report. Regardless of who was responsible for initiating discussions, the Department was less than prompt in furnishing requested information. The agency did not furnish written briefs on the legality of quick-reaction work-order contracts--as agreed in July 1979--until early December. Supplementary briefs, responding to specific questions and providing additional facts, were forwarded on January 18 and February 1, 1980.

The Department stated the fact that quick-reaction contracting is used only for work orders of great urgency which cost $250,000 or less and require performance periods of 6 months or less, indicates that the quick-reaction work-order system is used only on an exception basis. Our report pointed out that these conditions exist; however, our concern is that they are not being strictly enforced. In this work, we noted that the Department had awarded 37 work orders. We viewed in detail 12 of these work orders. For eight of them, the justifications and work statements, in our judgement, did not adequately document an urgent situation.

The Department stated that the report fails to identify that the quick-reaction work-order system is designed to reduce the incidence of sole-source procurements where the rationale is urgency, avoid the use of task assignment contracts, reduce informal commitments, and otherwise meet the Department's urgent procurement requirements very quickly. This was not mentioned in our report. Our efforts concentrated on the Department's actual use of this type of contract.

Our follow-on work shows, however, that some of these objectives are not being accomplished. We reviewed 35 of the 37 orders for which information was available, and found that 12, or about one-third of the total, were awarded sole-source. The Department justified the work on the basis that the contractor was the only firm capable of doing the work within the time required. This seems to contradict one of the basic principles of the quick-reaction work-order system, under which all contractors with master contracts are considered qualified to do any work that would fall under the quick-reaction work-order "umbrella." We believe the large number of sole-source work orders indicates that the Department has not, in fact, greatly enhanced competition by using the quick-reaction work-order system.

Additionally, three of the 35 work orders we examined were ratifications of informal commitments. Therefore, we would question the Department's statement that the quick-reaction work-order system reduces this practice.

The Department also disputes the statement that the quick-reaction work-order procedure "tends to limit competition for work in certain areas to a relatively small number of contractors for a long period of time." The Department's comment implies both that 3 years (the period of time the Department says quick-reaction contracts may not exceed) is not a long time, and that because the original multiple award of master contracts is competitive, there is not restriction on the number of competitors.

We disagree with this implication. We believe that 3 years is a long time to exclude potential contractors from consideration for Department of Energy work. We also believe that 25 master contractors for one solicitation are a relatively small number.

The Department disagrees with the statement in our report which states that master contractors did not bid for work orders because they did not have personnel or expertise available or they did not believe they were required to bid. This position is in direct conflict with evidence obtained by us from Department of Energy procurement officials during the course of the review. We were told that contractors did not bid because they did not have personnel with the necessary expertise available, or that they did not believe they were required to bid. We believe the quick-reaction work-order master contracts, as presently drafted, may not clearly reflect the Department's intent that master contractors submit work order proposals when solicited. (This point is important because if there is no such obligation, there may not be an enforceable contract.) Although the standard master contract presently used by the Department states that the contractor "shall" submit offers when solicited, the provision could be read as a procedural rather than a substantive one. We believe the Department should revise the master contract to indicate clearly that the provision imposes a substantive requirement on the contractor and perhaps specifically spell out the possible sanctions (such as termination for default) that could be imposed if the contractor does not comply with the requirement. In the absence of these revisions, we think it is questionable whether an actual contractual obligation arises on the part of the master contractor.

The Department points out that in July 1979 it held a meeting with the master contractors to inform them that they must bid on work orders, and since that meeting there is no longer the problem of master contractors not bidding. Subsequent to that meeting the Department issued 12 work orders. We found that all but four of them have been issued as noncompetitive procurements. Of the four competitive work orders:

--One order solicited two firms instead of the normal three. Even so, only one proposal was received and that firm was awarded the work order.

--One order solicited three firms; only two proposals were received for $34,073 and $92,827, respectively.

The Department chose the higher proposal based on the technical evaluations.

--Two orders involved soliciting three firms. Three proposals were received for each solicitation. In one case the Department chose the lowest bid; in the second case the middle bid was chosen.

CONTRACTOR INVOLVEMENT IN THE PERFORMANCE OF BASIC MANAGEMENT FUNCTIONS

The Department stated its concern that care be taken to assure that contractor support activities do not supplant basic management functions. To this end, the Department states that it takes special consideration in the award and administration of these types of contracts to assure that work performed is not in violation of Federal policy prohibiting the contracting out of basic management functions. They also reported that they had already recognized the potential problem and had published orders--which are in concert with other applicable Federal regulations, policies, and directives--to guide the Department's use of support service contractors and that they have no intention to contract for the performance of basic management functions.

We recognize that applicable Federal regulations, policies, and directives regarding this issue are broad so as to allow each Federal agency to develop regulations tailored to their specific needs. We are concerned, however, that previously issued orders may not be sufficient to eliminate contracting for basic management functions and that more specific orders are required to provide the maximum practicable front-end control.

In addition, in the detailed response to our conclusions, the Department stated that our conclusion that contractors are performing basic management functions is not correct. We have not reported that contractors are performing basic management functions. We pointed out that contractor "involvement" in the performance of basic management functions does not mean that contractors are in fact performing these functions. We do not know whether they are or are not. We do maintain, however, that as long as contracts are being written which allow contractors the latitude to perform basic management functions, there is a far greater likelihood of such contractor performance than there would be if contracts clearly specified what functions the contractor is and is not to perform.

The Department expressed particular concern regarding our analysis of the national power grid system study. We believe the Department's response misstates a number of facts and fails to address the primary issue--that being the congressional requestor's expressed interest in limited industry involvement in this study.

A memorandum concerning a 1975 report prepared by the Congressional Research Service for the late Senator Metcalf shows he was concerned that the authors of the study were forced to rely upon data supplied by the electric industry, which strongly opposed a national grid. In September 1977, Senator Metcalf sent a letter to Secretary Schlesinger requesting that the Department conduct a further study of the national grid issue. He stated in his letter that he intended to propose an amendment to the National Energy Act to provide for a study of the grid system by the Department. He was subsequently advised by two Department officials that the Department could make the study without the specific legislative authority. He concluded his letter by stating that if the Department felt it was necessary or desirable, he would introduce the amendment so that the study could be done expeditiously. Furthermore, he hoped that the work could be performed in-house so that the Department could develop its own core of expertise.

Despite assurances given the Senator that the Department could do the work, an internal study shows that when deciding between allowing the study to be performed in-house or by contractor personnel, the Department chose to rely on contractors. As for the primary question of whose data to use, the Deparment again chose to use industry data while acknowledging that this study would have the same shortcomings as previous studies. Nowhere in the review of options did the Department show how the shortcomings of using contractor personnel and industry data could be mitigated.

In its response, the Department states that it established a steering committee comprised of Department of Energy representatives, other concerned Federal agencies, and a project manager. It is questionable, however, how much control was exercised under this arrangement. Correspondence between the project manager and the chairman of the steering committee shows that on at least two occasions, the project manager could not obtain a copy of two contractor's management plans on work statements. In fact, in a February 26, 1979, memo to the steering committee, the project manager stated that one contractor would not submit the electric industry's information used in reaching a conclusion on a section which was crucial to the grid study. The project manager concluded the memo by reminding the committee of the desire of Senator Metcalf to do the study in-house.

The Department's response to our report contends that the work could not be performed in-house because of limited personnel resources with the necessary special expertise. We recognize that contractor support is needed periodically. However, we are skeptical that the Department does not have the expertise to perform the following work, (which comprised 3 of the 13 grid tasks):

--Identify and describe the various concepts associated with a "National Power Grid."

--Describe significant issues pertaining to the concepts of a "National Power Grid."

--Identify and discuss the significant issues pertaining to the cost of services provided by public, private, and cooperative electric power systems.

Even with these shortcomings, we recognized in our report that the Department could still retain the ultimate policy decision, but we are concerned with the Department's ability to arrive at an unbiased opinion while constrained by a lack of knowledge of methodology and data base. We understand that the Department's Office of Inspector General has reviewed this study and plans to issue a report.

In addition to the above, the Department indicated that the report's statement that contracting officers do not question the scope of work drafted by the program office is simply wrong. The Department also stated that it has a review process for support service contracts. We acknowledge that, on paper, the review process should work effectively. However, we believe the system does not operate as an effective check and balance of the procurement system. The reviews by personnel in the program offices--even at the Assistant Secretary level--may have a built-in and understandable concern for accomplishing the program's mission. This concern may interfere with an objective view of the propriety of contracting for a particular function.

Therefore, the key to the system is the procurement office, an organization which is in a position to review independently procurement requests to determine their appropriateness. As was stated in the report, however, we noted the general attitude in the Department's procurement organization that the procurement system exists primarily to facilitate the work of the program offices, at the expense of adhering to sound procurement practices. We were, in fact, told by contracting officers that the funds were budgeted to the program office and, therefore, the program office could spend it however it pleased.

NEED FOR MORE CONTROL OVER DOE'S CONTRACT ADMINISTRATION

In general, the Department indicated that it believes its system for voucher approval and contract monitoring is proper. It explained that contracting officers maintain control over contract administration and closeout and exercise their responsibilities through a system of delegations of authority. The Department stated it would continue to examine its practices to strengthen its control over support service contracts. The Department stated, however, that the report does not take into consideration increased workload without a corresponding increase in staff.

We believe the report adequately points out that staffing in the procurement office was not sufficient to carry out its responsibilities. On page 13, the report states that according to procurement officials, contract administration functions are delegated because of the lack of sufficient staff to internally carry out the office's functions.

Our report recognizes that technical assistance is expecially helpful where the data for evaluating progress and performance and for approving payments involve highly technical terms and complex subjects not entirely familiar to contracting officers. However, our report expressed concern that by delegating administrative contract functions outside the procurement office (in particular to the program offices) to the extent that they have, contracting officers have abrogated their responsibility under the Federal Procurement Regulations and risk losing essential control over contracts after award. We are also concerned that a conflict of interest may arise when program personnel who initiate procurement requests, and thus have a vested interest in the apparent success of the project, are responsible for monitoring the contract.

The Department has also stated that cost monitoring has not been delegated to the program offices, as stated in our report. At the time of our review, most payment vouchers were approved by the program manager. We did not find any evidence of contracting officer oversight of this procedure. Although procurement officials stated that progress and financial reports are technically supposed to come under the scrutiny of the contracting officer, contracting officers told us that they only review these reports when informed by the program office that there is a problem with the contract. We found no instances of this actually happening. Contracting officers also told us they did not have any contact with a contract after it was awarded, unless a modification or change requiring a contracting officer's signature was initiated prior to completion of the contract. We believe that this situation indicates that cost monitoring had been delegated to the program offices.

The Department stated that the review and provisional approval for contract vouchers has been assigned under a memorandum of understanding to the Defense Contract Audit Agency. Under this arrangement the Department points out the contracting officers retain control through receipt of copies of vouchers and periodic financial information from the Defense Contract Audit Agency and receives, reviews, and approves the final voucher. This new procedure had not been implemented at the time of our review, and thus we have no opinion on it. If properly implemented, however, so that control over voucher payment is retained by procurement personnel, we should have little problem with it.

We agree with the Department's response to our report in that there has been some improvement in the backlog of expired contracts which have not been closed out. At the time of our review, the Department had about 2,500 contracts which had expired, but were not closed out. When the

Department commented on our findings in October 1979, about 650 of the 2,500 had been closed out and another 1,300 had been sent to the Defense Contract Administration Service for closeout. According to the Department, at the end of January 1980 about 800 contracts had been closed out and all the remaining expired contracts had been sent for closeout.

We continue to believe, however, that contracting officers should monitor progress on contract closeouts to insure that further delays do not take place and that there is assurance that (1) Government funds have been fully accounted for and properly charged for work performed under the contracts, (2) all Government property in the contractor's possession is accounted for, and (3) final acceptance of the contractor's work and payment of a final voucher are appropriate. In a December 1979 report issued by the Department's Office of Inspector General, the Office stated that the Department did not have adequate control over Government-owned property.

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-196489 February 15, 1980

The Honorable John D. Dingell
Chairman, Subcommittee on Energy and Power
Committee on Interstate and Foreign Commerce
House of Representatives

Dear Mr. Chairman:

We have reviewed the legality of two types of contracts in which you recently expressed interest, Quick Reaction Work Order (QRWO) master contracts and task order contracts; the Department of Energy's use of such contracts was discussed in our recent report on that agency's practices for awarding and administering contracts, EMD 80-2, November 2, 1979.

While we conclude that the contracts are legal in theory, we believe DOE should modify its use of them in order to achieve a greater degree of competition as contemplated by the procurement statutes and regulations.

QUICK REACTION WORK ORDERS: BACKGROUND

QRWO contracting is a relatively new procurement method (although it has been used by the National Aeronautics and Space Administration's Goddard Space Flight Center since 1963) and is not described in current procurement regulations. DOE states that it uses QRWO master contracts to purchase data gathering and analytical services which it cannot perform in-house and which it expects to need so urgently that they could not otherwise be procured competitively.

QRWO master contracts encompass broad, functional areas of work. On the basis of technical, business/management, and cost proposals for such areas of work, DOE awards both a firm-fixed-price master contract and

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a cost-plus-fixed-fee master contract to each of a limited number of qualified offerors, and agrees to issue work orders totaling at least $2,500 per contract over a three-year period (each master contract is for one year with two "firm" one year options). DOE indicates that the $2,500, which is obligated at the time a master contract is awarded, comes from no-year appropriations; such funds need not be used during a particular year, but remain available until obligated or expended.

Master contracts are not used automatically. When a DOE program office identifies a specific requirement in the general area of work covered by a master contract, it must first consider using a conventional method of procurement, since QRWOs are "not a substitute for the normal procurement process." Before a QRWO can be issued, program personnel must determine, in writing, that the specific task (1) will cost $250,000 or less; (2) falls within the area of work covered by the master contract; (3) will result in a discrete deliverable; and (4) is urgently required, due to circumstances beyond the control of the program office. In addition, there must be a certification that the Government will be adversely affected if a QRWO is not issued; a contracting officer must concur in these determinations.

A work order, when issued, serves as the vehicle for solicitation, submission of proposals, and placement of work requirements. According to DOE, three master contractors, selected by a program office, generally will be asked to submit proposals. Following evaluation of these on a quick, informal basis, DOE will modify the master contract of the lowest-priced, technically acceptable offeror to include the specific task to be performed. If only one master contractor is solicited, a justification for noncompetitive procurement is required. If the parties are unable to agree on cost or price, a contractor may be directed to begin work and the cost or price will be determined in a Disputes Clause proceeding. DOE indicates that it expects to issue work order solicitations, evaluate proposals, and have contractors begin work within a period of 30 days.

In August 1979, DOE issued a QRWO solicitation under which it may award up to $45 million over a three-year period. Work areas include (1) support for program planning, program monitoring, and energy analysis; (2) DOE staff support; and (3) general tasks. An area (1) contractor, according to the solicitation, may be required to maintain current knowledge and report on the state of science and technologies or programs; identify gaps in current research and development programs; or recommend criteria for program selection, using such techniques as cost/benefit, environmental, financial and statistical analyses.

All area (3) master contracts under this solicitation were set aside for small business. In this area, contractors may, for example, be required to develop surveys, questionnaires, and other sampling tools, conduct program, scientific, and technology workshops and conferences, or provide clerical, transcription, editing, and logistical services for public meetings. In addition, 25 percent of the master contracts in work areas (1) and (2) were to be awarded to small business firms if a sufficient number of technically acceptable proposals were received from such firms. A prospective contractor could propose in any or all of the three work areas. The estimated value of all contracts to be awarded under this solicitation was $25 million, with a ceiling of $45 million; individual work orders were limited to $250,000 per contractor per master contract and total work orders to $5 million per contractor per master contract.

In another QRWO solicitation, issued in June 1979, DOE sought technical support in the areas of environmental, socioeconomic, and industrial health for its Office of Environmental Activities under the Assistant Secretary for Energy Technology. The maximum amount for all contracts under this solicitation was $3 million.

The two procurements described above appear to be typical of the use which DOE will make of QRWO master contracts, although the agency has indicated that it may, in the future, procure goods and supplies, as well as studies and consulting services, in this manner.

TASK ORDER CONTRACTS: BACKGROUND

Task order contracts usually are awarded competitively under broad general statements of work, calling for contractor research and assistance in a given area with specific work to be ordered in the future. Once a contract is awarded, and as the need arises, DOE issues individual task orders specifying the actual work to be performed. The contractor then submits a plan specifying the level of effort (usually stipulated in terms of direct staff days or hours) to be utilized in accomplishing the required task, and the contractor's proposed approach. After reviewing the plan and, when appropriate, after negotiations with the contractor, DOE approves the plan. In other words, these contracts [hereafter referred to as level-of-effort task order contracts] establish a relationship between DOE and the contractor whereby DOE purchases a specific amount of contractor time in a given research area, with the contractor usually submitting a report of its findings.

The purpose of these level-of-effort task order contracts, like that of QRWO master contracts, is to permit DOE to obtain assistance in a given area which undoubtedly will be required over a definite period of time but the extent and specifics of which are unknown at the time of the award. Unlike QRWOs, however, there is no competition at the time task orders are placed.

LEGAL DISCUSSION -- QRWO MASTER CONTRACTS

In examining the legality of QRWO master contracts, we considered the nature of the contract and the statutes and regulations dealing with competitive procurement. At the request of your staff, we also considered conflict of interest and small business aspects of QRWO contracting.

Nature of the Contract

We initially reviewed the nature and extent of the parties' obligations to determine whether a QRWO master contract is actually a valid, enforceable contract. DOE indicates that the essence of the QRWO master contract system is its acquisition of qualified contractor standby capability through the obligation of master contractors to submit bona fide proposals when solicited. However, we found that as of August 1979, approximately half of the firms which held master contracts had not been awarded work orders, in part because master contractors submitted work order proposals which were not competitively priced and in part because master contractors did not submit bona fide proposals in response to work order solicitations. (As indicated in our report, some contractors do not believe they are required to submit an offer whenever they are solicited.)

We believe the QRWO master contracts, as presently drafted, may not clearly reflect DOE's intent that master contractors be obliged to submit work order proposals when solicited. (This point is important because if there is no such obligation, there may not be an enforceable contract. See the discussion of the doctrine of mutuality of obligation in Calamari and Perillo, The Law of Contracts § 67 (1970).) Although the standard master contract presently used by DOE states that the contractor "shall" submit bona fide offers when solicited, the provision could be read as a procedural rather than a substantive one. We believe DOE should revise the master contract to clearly indicate that the provision imposes a substantive requirement on the contractor and perhaps specifically spell out the possible sanctions (such as termination for default) that could be imposed if the contractor does not comply with the requirement. In the absence of these revisions, we think it is questionable whether any actual contractual obligation arises on the part of the master contractor.

Competition

Federal agencies are required to use procurement methods permitting "such full and free competition as is consistent with the procurement of types of property and services necessary to meet the requirements of the agency concerned." 41 U.S.C. 253(a) (1976). This and similar language in 10 U.S.C. 2305(a) (1976), which applies to the Armed Services and NASA, has long been held to vest in procuring agencies reasonable discretion to determine the degree of competition that is consistent with their needs. 50 Comp. Gen. 542 (1971); 43 Comp. Gen. 223 (1963). See also Federal Procurement Regulations (FPR) §§ 1-1.301-1; 1-1.302-1(b) (1964 ed. amend. 169); and 1-3.101(d) (1964 ed. amend. 194).

Despite DOE's statements to the contrary, we find that award of QRWO master contracts is a form of prequalification of offerors. In most, but not all, cases this is an undue restriction on competition, since it amounts to a premature determination of responsibility. See Rotair Industries, 58 Comp. Gen. 149 (1978), 78-2 CPD 410; D. Moody & Co., Inc., 55 Comp. Gen. 1 (1975), 75-2 CPD 1. Any system of prequalification, of course,

> " * * * is to some degree in derogation of the principal tenent of the competitive system that bids or proposals be solicited in such a manner as to permit the maximum amount of competition consistent with the nature and extent of the services or items being procured. * * * The * * * pertinent [inquiry however], * * * is not whether it restricts competition per se, but whether it unduly restricts competition." Department of Agriculture's Use of Master Agreement, 54 Comp. Gen. 606, 608 (1975), 75-1 CPD 40 (hereafter Agriculture I).

Our Office has sustained prequalification of offerors in the rare instances when it was shown that such prequalification was in the best interest of the Government and that it did not unduly restrict competition in the particular circumstances involved. For example, we approved production line certification of manufacturers prior to and independent of any particular procurement by the National Aeronautics and Space

Administration (NASA) because testing of microcircuits to determine the extremely high level of quality and reliability demanded by the space program was either impossible or impracticable. 50 Comp. Gen. 542 (1971). We also approved a Department of Health, Education, and Welfare (HEW) plan to meet urgent requirements placed upon it by Congress and the White House by entering into basic ordering agreements with qualified offerors; we found that since sole-source awards were the only likely alternative for tasks which could not be performed in-house, prequalification actually enhanced competition. Department of Health, Education, and Welfare's use of basic ordering type agreement procedure, 54 Comp. Gen. 1096 (1975), 75-1 CPD 392.

In addition, we approved a Department of Agriculture prequalification scheme after it was modified to provide that all qualified firms in particular skill areas would receive master agreements and that small firms which could not compete for large, requirements-type contracts would be able to compete for individual projects; we found that both costs and pressures for using less competitive methods of procurement would be reduced. Department of Agriculture's Use of Master Agreements, 56 Comp. Gen. 78 (1976), 76-2 CPD 390 (hereafter Agriculture II).

In many other cases, we objected to prequalification schemes because they were not shown to be other than unduly restrictive of competition. See, e.g., Agriculture I (where the only justification was the administrative burden of making large numbers of solicitations available or evaluating large numbers of offers); 53 Comp. Gen. 209 (1973) (involving a National Highway Traffic Safety Administration proposal to establish a Qualified Offerors List without adequate procedures); and 52 Comp. Gen. 569 (1973) (involving the National Park Service's use of the negotiation exception for purposes of prequalification).

DOE has presented many of the same justifications for QRWO contracting as were presented by NASA, HEW, and Agriculture in support of the prequalification schemes which we upheld. DOE argues that the critical nature of its mission--formulation and execution of national energy policy--as well as the pace of national and international events and the unavailability of civil servants in required disciplines "presently combine to make DOE's needs unique among Federal agencies in degree of urgency." In the past, DOE states, it has met urgent requirements by awarding sole-source or level-of-effort task order contracts, a practice which may have increased costs, produced inferior products, and limited opportunities for competition, particularly for small and minority business firms. In addition, DOE acknowledges, it has sometimes found it necessary to authorize precontract costs, enter into letter contracts, or ratify informal commitments by unauthorized personnel. DOE concludes that use of QRWO master contracts should greatly reduce such undesirable procurement practices in exigency situations. DOE further argues that it lacks in-house capability to perform the studies for which it is contracting, and that it has developed adequate procedures for program offices wishing to use QRWOs.

In the HEW and Agriculture II cases, however, all qualified offerors and/or all firms in the competitive range were to be awarded master contracts; in DOE's case, the number of master contracts in any given work area will be limited. In this regard, the agency states:

> "[A]lthough DOE does not articulate the basis of selection in terms of award to all firms within a competitive range, in substance, selection is made on that basis. The number of awards is not established until actual source selection. The selection process is essentially one of choosing firms which, in light of announced criteria, are likely to be competitive with one another in work order competitions. Additionally, the aggregate capacity of potential awardees is taken into account. Factors considered include the expected normal and peak workloads * * *

> and other matters which bear on maintaining a viable competitive environment for work order competitions."

In evaluation of technical proposals for master contracts, it appears that DOE emphasizes experience; this was the case in the August 1979 solicitation. Cost proposals are evaluated according to the realism of the offeror's weighted hourly cost of doing business, based on direct labor costs for a mix of skills which DOE considers necessary for performance, plus indirect costs, with ceilings on G & A, overhead, and profit. In addition, if the total procurement is estimated at $5 million or more, it is conducted according to the procedures outlined in DOE's Source Evaluation Board Handbook. It appears that DOE, in using these evaluation procedures, will award master contracts to all qualified offerors, although the competitive range in some cases may be a narrow one.

In light of this explanation, plus the other justification advanced by DOE, we find the theory of QRWO master contracting to be reasonable and not, in and of itself, unduly restrictive of competition. However, our preliminary audit work, as of February 8, 1980, indicates that DOE has solicited only one master contractor in over 30 per cent of the work orders examined. Since all master contractors, by definition, are qualified in the broad general areas of work for which they hold contracts, and all have agreed to submit bona fide work order proposals when solicited, we believe sole-source awards of work orders should rarely occur. If in practice DOE's use of QRWOs does not reduce the number of sole-source awards, this method of procurement may not be consistent with procurement statutes and regulations.

In addition, we are concerned that once master contracts have been awarded, no additional solicitations will be issued by DOE and no additional contracts will be awarded for three years. In those cases upholding prequalification of offerors, we have emphasized that:

> "no manufacturer or producer is necessarily precluded from competing for a procurement for which he is able to provide a satisfactory product, and any such manufacturer or producer may become eligible to compete at any time that it demonstrates under applicable procedures that it is able to furnish an acceptable item meeting the Government's needs." Agriculture I. (Emphasis added.)

DOE states that annual solicitation, evaluation, and award would place an impossible burden on its program offices, would discourage use of QRWOs, and would result in contractors diverting their attention from performance to competition and negotiation. DOE further states that it must hold master contracts to a manageable number to be consistent with an expedited procurement.

We are not persuaded. Deliberate and complete exclusion of potentially qualified offerors for up to three years, merely or primarily to reduce administrative burdens, in our view is an undue restriction upon competition. For example, newly organized firms would be precluded from competition for a lengthy period. In August 1979 we also found a number of firms which had not competed for master contracts because they lacked capacity or capability at the time a solicitation was issued, but in less than three years wished to compete. We therefore believe that DOE should modify its QRWO procedures in this regard.

In addition, during competition for work orders, we see no reason for limiting the number of master contractors solicited to three. Since evaluation of work order proposals is quick and informal, and award generally is made on the basis of price, we believe that DOE should broaden competition at this stage by soliciting the maximum practicable number of master contractors for each work order.

Increasing the number of master contractors solicited should also insure that those who have not previously been awarded work orders will have an opportunity to compete. Contracting officers now are authorized to add to source lists prepared by program personnel at the time a work order is to be issued, using either a rotation system or lists which indicate which master contractors have not previously been solicited; so long as any master contractor has not been awarded a work order, contracting officers have been orally advised that at least one such master contractor should be solicited for each work order, DOE states. We believe DOE should increase this number and develop precise written guidelines for contracting officers.

Organizational Conflicts of Interest

The Department of Energy Procurement Regulations provide that it is DOE's policy to "identify and avoid or mitigate organizational conflicts of interest before entering into contracts, agreements, and other arrangements." See 41 C.F.R. § 9-1.5402 (1979). According to the regulations, an organizational conflict of interest exists when an offeror or contractor has "past, present or currently planned interests that either directly or indirectly, through a client relationship, relate to work to be performed under a Department contract and which (1) may diminish its capacity to give impartial, technically sound, objective assistance and advice, or (2) may result in it being given an unfair competitive advantage." Id. § 9-1.5403(a).

In order to "identify and avoid or mitigate" such conflicts of interest, DOE requires that offerors disclose relevant information bearing on the possible existence of any organizational conflicts of interest or warrant that no such conflicts exist. Id. §§ 9-1.5405 and 9-1.5407. The regulations further provide that if DOE determines a conflict exists, the contracting officer shall disqualify the offeror, avoid the conflict by including appropriate conditions in the resultant contract, or if the best interests of the Government so require, award the contract to the contractor without regard to the conflict. Id. § 9-1.5409.

DOE's QRWO master contract solicitations advise offerors of its policy of avoiding organizational conflicts of interest and require offerors to submit disclosure statements reflecting potential conflicts.

However, DOE does not determine whether a conflict exists before award of the QRWO master contract, but rather makes such determinations as part of the work order solicitation and award process.

We believe this procedure represents the only feasible means of avoiding organizational conflicts of interest, since the areas of work described in master contracts are so broad that almost every offeror would have a potential conflict. We note with approval that DOE has spelled out, in QRWO master contract solicitations, the consequences of failure to disclose or misrepresentation of any revelant interest. An offeror may, because of possible conflicts of interest, propose to exclude specific kinds of work contained in a QRWO solicitation.

Small Business Preference

Congress has declared that a fair proportion of the total Federal purchases and contracts should be placed with small business concerns. 41 U.S.C. 252(b) (1976); FPR § 1-1.702 (1964 ed. amend. 192). In discussing this obligation, DOE states that in QRWO contracting, small business competition is enhanced by enabling such firms to compete for individual projects from which they would otherwise be precluded due to the size of the contracts. In addition, DOE believes that prequalification will reduce the cost of responding to successive solicitations, thus encouraging small business to compete.

We note that in the August 1979 solicitation, DOE defined and totally set aside an area of work which it believed appropriate for small businesses; in addition, 25 percent of the master contracts in other areas of work under that solicitation were set aside. DOE states that special recognition of the needs of small business will be a policy in QRWO solicitations, and that it generally will set aside a minimum percentage of awards for such firms. Under the August 1979 solicitation, the agency's Director of Small and Disadvantaged Business Utilization was to screen work orders, and small businesses were to be added to lists of firms solicited whenever the director recommended.

Assuming that these declared policies are followed and that small businesses actually do receive a fair proportion of QRWO master contracts and work order awards, we believe DOE will have met its statutory obligations to small business.

LEVEL-OF-EFFORT TASK ORDER CONTRACTING

Level-of-effort task order contracts are awarded on a competitive basis, and we find nothing inherently illegal in their use. However, the broad statements of work contained in the initial solicitation can make meaningful competition difficult and may not insure that DOE ultimately obtains acceptable products at the lowest possible price under a given individual task order. Furthermore, since under level-of-effort contracts a contractor is usually reimbursed for time expended, rather than results achieved, these contracts have the potential for maximizing rather than minimizing cost to the Government. In this regard, DOE has conceded that "[l]evel-of-effort contracting is recognized as a form of contracting which imposes few risks and little incentive on the contractor * * *" and that "[t]he level-of-effort contractor can easily become complacent since he does not even have to 'sell' his proposals to receive award of a task."

For these reasons, we believe DOE should take steps to more clearly state and define the work to be required over the course of the contract period in future contract solicitations. Additionally, we believe that DOE should, whenever possible, avoid the use of these contracts. We believe DOE's QRWO contracting system is preferable to task order contracting.

I trust this information will be helpful to you.

Sincerely yours,

R.F.Keller

Deputy Comptroller General
of the United States

DEFENSE LOGISTICS AGENCY
HEADQUARTERS
CAMERON STATION
ALEXANDRIA, VIRGINIA 22314

IN REPLY REFER TO -ACA

10 DEC 1979

Honorable John D. Dingell
Chairman, Subcommittee on
Energy and Power
Committee on Interstate and
Foreign Commerce
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

This is in response to your letter of November 13, 1979 whereby you forwarded to us a copy of the Comptroller General's November 2, 1979 report entitled "The Department of Energy's Practices for Awarding and Administering Contracts Need to be Improved." You asked for our views and comments on the GAO report and on the conclusions and recommendations on pages 16-18 of the report as well as a list of expired contracts forwarded by DOE to DCAS for closeout, and certain statistics and documentation pertaining to the DCAS effort in administering DOE contracts. You asked for our reply by 10 December 1979.

Since the data on expired contracts must be obtained from our field offices and a significant number of contracts are involved, we have been unable to compile a complete table of expired contracts at this time. In accordance with the 3 December 1979 discussion between Mr. Dave Finnegan of your staff and Mr. William Keating of my staff, we are forwarding herewith that portion of the contract data which we have received at this time and will mail the remainder by 21 December 1979.

The following comments are keyed to the numbered paragraphs of your letter:

1. We are in general agreement with the thrust of the GAO report as relates to the selected aspects of procurement addressed therein. With respect to the specific conclusions and recommendations on pages 16-18, we certainly agree that only goods and services actually required should be contracted for, and these should be obtained at the lowest possible price, all factors considered. By the same token, in furtherance of the objective to obtain the best possible price, competitive contracting should be maximized and sole source contracting should be minimized to the extent possible consistent with program objectives. Regarding the weaknesses noted in

GAO copy

contract administration, specifically the recommendation for DOE contracting officers to monitor the contracts assigned to DCAS for closeout, we stand ready to assist and work with DOE in a joint effort to monitor and closeout as expeditiously as possible the remaining physically completed contracts assigned to us, within the limits of our resources.

As a matter of information, the closeout of DOE contracts was undertaken by us in recognition of the spirit and intent of Policy Letter No. 78-4, dated 8 August 1978, subject: Field Contract Support Cross-Servicing Program, issued by the Office of Federal Procurement Policy to the Heads of Executive Departments and Establishments (copy enclosed). The objective of this letter is to encourage Federal agencies to make use of existing field contract administration components in the administration of Government contracts. In accepting the closeout of DOE contracts we have, however, been operating under somewhat of a handicap caused primarily by the age of some of the contracts and the fact that the DOE has retained signature authority for its contracting officers on the final contract completion statement.

2. Each contract forwarded to DLA for administration is accompanied by an individual letter of delegation which gives specific instructions for administering the particular contract, information as to the DOE personnel involved and a list of the delegated functions. (A typical letter of delegation is enclosed.) These letters are consistent with the September 29, 1977 Interagency Agreement between the Energy Research and Development Administration and the Defense Logistics Agency for the Performance of Contract Administration Services in Support of ERDA Contracts. (copy also enclosed). This Agreement, which establishes the policies and procedures by which the Defense Logistics Agency (DLA) will perform contract administration in support of ERDA, sets forth in its Appendix A, the contract administration functions which may be delegated to DLA, and provides that the Agreement would remain in effect when the functions of ERDA were transferred to a successor agency (DOE).

We are presently working with DOE in the development of a standard letter of delegation which in the future will be utilized for all DOE contracts sent to DCAS for administration.

3. The 60 contract administration functions listed in Appendix A to the Interagency Agreement cover most of the functions which could be required in the administration of a wide variety of contracts. Not all of the 60 listed functions would be performed on any single contract. For example, only in specialized instances would it be necessary to perform function No. 10, Manage Special Bank Accounts; No. 15, Issue Tax Exemption Certificates, No. 21, Perform Property Administration; No. 52, Negotiate Price Adjustments Pursuant to the Cost Accounting Standards Clause for the Signature of the ERDA Contracting Officer, etc. The functions performed depend on the type of contract (firm-fixed price,

cost reimbursable, incentive, ect.), the terms of the contract itself and the provisions of the DOE letter of delegation.

We have operated under the provisions of the DLA-ERDA (DOE) Interagency Agreement in FY 78 and FY 79 and expect to continue to do so in FY 80. We anticipate no change in the Agreement nor in the list of contract administration functions which may be delegated to DLA.

Specific positions are not assigned to perform contract administration functions on DOE contracts. DLA field offices report the number of hours worked in support of DOE. During FY 78 and FY 79, contract administration functions performed for DOE were equivalent to 28 manyears and 40 manyears of effort, respectively. This was determined by dividing the number of manhours performed on DOE contracts by a 2,008 hour manyear. For FY 80, DLA expects to expend about 40 manyears of effort on DOE contracts which will cost about $1.7 million. DLA bills DOE on a monthly basis for the manhours reported in performing contract administration functions at the standard DOD hourly rate. The amount reimbursed DLA in FY 78 and FY 79 was $1.1 million and $1.7 million, respectively. For FY 80, $1.7 million is the amount anticipated for work to be performed on DOE contracts. We do not perform contract administration functions for all DOE contracts. We have been informed that DOE administers some of their contracts themselves and that the office of Naval Research administers others. We are not aware as to whether any other organizations (agencies) are involved in the administration of DOE contracts.

4. Monitoring Contractor's Financial Condition. The scope, depth and detail of financial monitoring or surveillance varies depending upon the financial strength and management competence of each particular contractor. Some contractors may require in-depth financial surveillance while others with strong management and financial capabilities might require very limited surveillance activity such as review of readily available published balance sheets and operating statements. DCAS Financial Services elements utilize a "management by exception" technique designed to focus the attention of our financial analysis personnel on those contractors most likely to experience financial difficulties. Thus, our procedures provide for performance of in-depth postaward financial surveillance when: (i) the contractor is receiving Government financing such as advance payments, progress payments or guaranteed loans, (ii) the contractor requests financing not otherwise authorized in the contract, or (iii) the contractor has a marginal financial condition.

When a contractor encounters substantial financial difficulties the Financial Services element advises the DCAS Administrative Contracting Officer (ACO). If the financial problems are of such magnitude as to jeopardize contract performance, the ACO forwards a Report of Adverse Developments to DOE. The Report of Adverse Developments contains a summary of the contractor's financial condition, an analysis of the latest financial statements, including cash flow statement, as well as the status of any pending claims, guaranty agreements, or subordination agreements. The report also summarizes the contractor's credit position with lending institutions and vendors and includes such other financial data as may affect the contractor's ability to continue performance. Financial surveillance is automatically performed if the contract award was made over a negative preaward survey. For the balance of contractors not covered by one of the criteria above, we perform limited surveillance unless financial difficulties become apparent during contract performance.

Monitor Compliance with Labor Standards. Since DCAS does not normally administer construction contracts, we have not become involved, to date, in administering labor standards provisions on DOE contracts. The Department of Labor is charged with enforcing labor standards and when we do administer a contract with these provisions, our role is limited to violations detected by DCAS being reported to the Department of Labor for appropriate action.

Monitoring Contractor's Overtime Claims. The contractor's overtime claims are monitored by reviewing his system of accounting for overtime and/or the facts pertaining to a specific claim. The contractor's method of accounting for overtime is reviewed as part of the Accounting System Review performed by the cognizant audit agency (generally DCAA). Review of vouchers reveal whether the contractor is adhering to his approved system. If the overtime is not provided for in the contract, we perform an analysis of the contractor's request for overtime or premium shift cost. The report will generally include the following

a. A statement concerning the validity of the contractor's reasons justifying the need of such overtime costs.

b. A statement concerning the adequacy of contractor's cost accounting system and procedures to assure proper recording and control of such costs.

c. A recommendation as to whether such costs are reasonable, allocable, accounted for in accordance with the contractor's disclosed accounting practices, and in accordance with any limitations or exclusions set forth in regulations or otherwise included in the contract.

5. Enclosed is data requested which covers nine of the twelve reporting offices. As previously stated, the remainder will be mailed to you by 21 December 1979. Mr. Thomas Marlow, 274-7725, is the DLA contact point should there be any further information required.

Sincerely,

(signed)
GERALD J. THOMPSON
Rear Admiral, SC, USN
Deputy Director
(Contract Administration Services)

4 Encls
1. Policy Ltr
2. Ltr of Delegation
3. Interagency Agree.
4. DOE Closeout Contracts
(9 Regions)

cc: GAO

Mr. DINGELL. Our next witness is Mr. Fitzgerald. We are happy to see you before the committee again and appreciate your assistance to us. You have been of great value to us in early times, and we trust that you are satisfied that your labors in assisting us will bear great fruit.

Before we recognize you, the Chair does have a statement from his friend and colleague, Herbert Harris, II, which will be inserted in the record at the appropriate place.

Mr. Harris is engaged in a number of investigations of this matter, and, as is the Chair of this subcommittee, is much troubled about the practices of DOE on these matters.

[The prepared statement of Congressman Harris follows:]

STATEMENT OF HON. HERBERT E. HARRIS II, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF VIRGINIA

Mr. Chairman, I appreciate this opportunity to present my views on contracting policies of the Energy Department. During my subcommittee investigation of personnel ceilings and contracting out I became aware of the Chairman's excellent work in this area. Your investigation of procurement practices in the Department of Energy and the revelation that in 1978 DOE obligated 79 percent or $8.5 billion of its total fiscal year appropriations through contract underscores the importance of congressional awareness of this dangerous aberration in our Government.

My Subcommittee on Human Resources has been investigating the relationship between personnel ceilings and contracting during this Congress and the findings have been most disturbing.

Although OMB has informed us that contracting out to avoid personnel ceilings violates regulation, we have found this a common practice.

Despite OMB's statement to the subcommittee that "cost effectiveness should be the deciding factor" for work which could be performed in-house or under contract, executive agencies do not follow this principle.

Despite repeated attempts to curb the practice, executive agencies continue to obligate excessive amounts of annual funds at the end of the fiscal year.

I have become convinced that personnel ceilings are forcing the contracting out of work regardless of cost effectiveness. This raises serious public policy issues, and the Department of Energy presents us with a classic case study.

I supported the establishment of a Department of Energy, and I have voted for the appropriations necessary for that Department to carry out its programs. However, now I fear that a substantial portion of that appropriation is going to brokers whose sole purpose is to procure needed goods and services for the Federal Government. Moreover, I fear that functions which are inherently governmental in nature, are being provided through contractual arrangements.

The recent GAO report, prepared for the chairman, indicates that contractors are performing basic management functions at DOE. Preliminary information from a separate GAO report which is being prepared at my request indicates that this practice is not restricted to that agency, nor are the inproprieties limited to the performance of management functions.

I am especially disturbed by the fact that we do not know how much influence is being exerted by outside interests, nor how much of the money we appropriate for programs is being channeled through the hands of contractors and consultants. The revelations of past practice of DOE appear to be indicative of the problem.

During 1977 and 1978, Congress spent months developing a comprehensive energy policy. When the National Energy Act finally passed Congress in October 1978, it contained a utility rate reform provision which required State utility commissions to consider a variety of utility rate reforms. Shortly after the legislation passed, DOE hired a major consultant to the private utility industry to prepare the utility ratemaking guidelines for the States. In another case the DOE decided to hire an energy industry consultant to perform a basic DOE management function involving the Government's poor performance in collecting and utilizing energy information. Historically, DOE has relied on the energy industries and their trade associations to voluntarily supply essential energy data. In 1977, Congress specifically created the Energy Information Administration (EIA) as the DOE's primary energy information component so that Federal agencies, Congress, and the American public would have access to independent energy data. In fiscal year 1980, Congress authorized over $108 million for EIA and in fiscal year 1981, the President has requested $116.2 million so that Congress can have the kind of independent energy data it needs to make sound energy policy. Unfortunately, this money is not being used as Congress intended. The EIA is not gathering independent data, it is paying contractors to collect data already generated by the oil and gas industry—information available before EIA was created.

I believe that the Congress has a right to know how much of the funds which are appropriated for programs are obligated under contract. Rigorous oversight during the authorizations process is extremely important, and I commend the committee for its initiative in this area.

I urge you to continue in this endeavor by requiring DOE officials to outline how they intend to accomplish the programs for which they request authorization. This process would allow the authorizing committee the opportunity to voice its opinion that a program is so closely tied to the public interest that it requires in-house performance.

Members will be able to better determine the degree of control which we maintain over authorized programs. A core capability should be maintained for programs which require such a capability. But most importantly, we will be able to view how activities are being accomplished by comparing in-house expenditures with contract obligations.

For example, the knowledge that 79 percent of the Department of Energy's appropriation was being obligated under contract would underscore the importance of continuous oversight of that agency's procurement practices. It would also indicate the potential for undue influence by outside interests being exerted on policy development.

I intend to pursue this issue as the House considers appropriations measures for fiscal year 1981, and I feel that the work of this subcommittee will increase the awareness of Congress.

Thank you for providing me with the opportunity to present my views on this issue.

Mr. DINGELL. Mr. Fitzgerald, we are happy to welcome you.

STATEMENT OF A. ERNEST FITZGERALD

Mr. FITZGERALD. Thank you, Mr. Chairman, members of the subcommittee. Just as a preface, I might add, Mr. Harris' staff was helpful to us in this inquiry, as was Congressman Rosenthal's staff. I would like to thank them at this time.

I want to emphasize at the outset that my testimony reflects my personal professional views which have not been cleared with the Air Force or the Department of Defense.

Mr. DINGELL. You have been requested specifically by this subcommittee first to assist us in this undertaking and, second, to provide us with those evaluations in precisely the fashion that you allude to. So I want the record to be very plain that you were carrying out the request for the subcommittee, and that you were doing that which you were detailed by the Department to do on behalf of the subcommittee.

Mr. FITZGERALD. Thank you, sir.

As contrasted to my earlier assignment to assist your staff in evaluating the Department of Energy construction contracts on the Strategic Petroleum Reserve, most of our effort in the current assignment has been focused on the service contracts.

The General Accounting Office testimony prepared for today's hearings states on page 6:

> When using contractors, care must be taken to assure that contractor support activities do not supplant normal management functions. Both the Office of Management and Budget and the Department of Energy recognize the potentially damaging effects of having private enterprise perform basic management functions for the Government. To mitigate these negative effects, the Office of Management and Budget has issued directives and the Department has published orders regulating the behavior of Government in its relationship with contractors.

Although the above quote focuses on the issue of using contractor personnel to perform basic management functions, it is clear that the general thrust of OMB governing regulations are also aimed at requiring consideration of the relative cost-effectiveness of performing service functions in-house versus having them performed by contract.

I would like to deviate for a moment here to say that I believe, and I think we have some experience to demonstrate this, that the competition that can be generated between in-house operators and contractors who might do the same function is a very healthy proposition, or it can be if it is perceived as being honest and fairly conducted.

For example, in the contracting-out hearings before the subcommittee, the Subcommittee on Human Resources of the House Post Office and Civil Service Committee, Congressman Harris' committee, Mr. W. Bowman Cutter, of OMB, testified:

> The manner in which that work is performed should be determined by the agencies under the policy of Circular No. A-76. Specifically, governmental functions should be performed by Federal employees while products and services that can

only be provided in the private sector should be obtained by contract. In other cases, cost effectiveness should be the deciding factor.

I should like to deal with Mr. Cutter's statement in three parts: The first part of Mr. Cutter's statement: "Governmental functions should be performed by Federal employees."

My comment: It appears that OMB and GAO are in complete agreement on this point, and I wholeheartedly concur.

In a report to the Congress entitled "A Review of the Department of Energy's Energy Tax Policy Analysis," March 13, 1979, the Comptroller General wrote:

> Although GAO believes that energy tax analysis is important and should be done, GAO questions the means the Department of Energy has chosen to accomplish this work. The effect of the Department's contracting out such basic activities on a massive scale is to dilute its ability to keep essential control over the conduct of its activities, and to assure the Congress that its programs are being carried out in an efficient and economical manner.

Mr. **Dingell.** Isn't it also a fact that it tends to get a nongovernmental input into a governmental question, that that tends to have a highly——

Mr. **Fitzgerald.** Yes, sir, I think that point was extremely well developed in Congressman Rosenthal's report on the series of hearings they held, Mr. Chairman.

In response to this GAO criticism, DOE responded:

> Tax analysis of the sort recommended can only be most adequately addressed by highly specialized tax experts. It is unlikely that DOE could provide competitive salaries for such tax experts. The only way to obtain their services is through a consulting contract.

Clearly, this is, to me at least, an inadequate excuse for contracting out. As the Comptroller General pointed out in the report cited above, the Treasury Department is constrained by the same salary restrictions as the Energy Department. Nevertheless, it maintains a high level of tax expertise.

Mr. **Dingell.** They are the folks that advise the Government on tax policy and also the folks that provide most of the tax experts that are siphoned out of Government for the use of the private industry sector, both in terms of the legal practitioners and in terms of those moving into the accounting and corporate field.

Mr. **Fitzgerald.** It is a prime training ground for such people. This is based on my personal experience during the 4 years I have worked on Capitol Hill. There are a number of experts on congressional staffs on tax matters who are also constrained by Government salary limitations.

I want to pick up the second part of Mr. Cutter's statement to comment on, and that is "products and services that can only be provided in the private sector should be obtained by contract." This statement, though it seems to be obvious on its face, raises two serious questions. First, do we really need the products and services? That should be addressed before we consider any other matter, I believe, in connection with contracted-out services. In reviewing a number of the service contracts with your staff, it appeared to me that the answer could frequently be no.

Second, I believe consideration should be given to creating Government capabilities in some areas where they may not presently appear to exist. I am a strong proponent of the yardstick concept, especially in research and development and product development projects.

In the past, we have even made good use of the yardstick concept in manufacturing and ship construction in instances where the Government was the sole customer. As an aside, I have a personal belief, based on my consulting experience years ago, that many of our problems today in military acquisition, especially in procuring torpedoes and ships, can be traced to our abandoning our in-house activities, which even though they might not have been very good, served as a yardstick and kept us sharper in that area.

I believe it would be especially useful to have Government laboratories assist in developing and evaluating new energy approaches.

The third of Mr. Cutter's statements that I wanted to comment on: "In other cases, cost effectiveness should be the deciding factor * * *"

My comment: Clearly, this is not the case in many instances of contracting, especially for services. In addition to contracting to avoid salary limitations, it is also clear that DOE is justifying contracting out on the basis of in-house manpower ceilings. In an attachment to his January 14, 1980, letter to Chairman Dingell, commenting on the Comptroller General report on DOE contracting practices, Secretary of Energy Charles Duncan states:

> GAO does not take into consideration the increase in workload that was never compensated with a corresponding increase in the number of billets to process the increase.

The use of contracting out to circumvent personnel ceilings or to avoid salary limitations appears at first glance to be strictly prohibited by OMB rules implementing Mr. Cutter's stated policy. OMB Circular A-76, March 29, 1979, states in paragraph 6d(3):

> This Circular will not be used to justify a conversion on contract solely to meet personnel ceilings or to avoid salary limitations. When in-house performance of a "new start" is justified under this Circular but cannot be accommodated within agency personnel ceilings, an appeal for necessary adjustment to implement this Circular agency-wide should be made to OMB in connection with the annual budget review process.

To the layreader this might seem to be adequate protection in a policy matter, particularly regarding the use of contracting out to circumvent personnel ceilings or salary limitations. Unhappily, an examination of the terms of art in this statement indicate to me that opportunities exist for bureaucratic interpretation of loopholes. My fears on this score were confirmed when I consulted Mr. William Russell, OMB's leading expert on Circular A-76, in preparation for this hearing.

Mr. Russell explained to me that the phrase "conversion to contract" really meant conversion of existing in-house functions to contract after the date of the circular—March 29, 1979. Mr. Russell further explained that functions contracted out before the effective date of the circular were permitted under the grandfather concept.

As explained by Mr. Russell, the next loophole is the word "solely." Insertion of this word is interpreted to mean that an agency can contract out to meet personnel ceilings or to avoid salary limitations if it also has other reasons—real or contrived—to do so.

It also appears to me that the possibility of getting additional people to staff in-house performance of so-called new starts is a difficult option to pursue in today's climate and with the stated restriction that the appeal to OMB for more people be made in connection with the 1½ years long annual budget process. It is much easier to contract out, especially if the agency has ample money.

Mr. Russell referred me to paragraph 10b(1) of Circular A-76 for control of work already contracted out. This paragraph may provide a starting point for control through listing of contracts for future cost comparison. Even there, there are three gaping loopholes. First, there is the $100,000 threshold. In my experience, this kind of threshold—and I might add parenthetically, this also applies to new starts—simply invites unbundling, as we call it in the bureacracy, that is, breaking up contracts exceeding the threshold dollar figure into smaller packages of $99,000 or less. The second loophole is exclusion of contracts awarded under set-aside programs.

The third loophole is the provision for the agency, itself, to determine whether to include contracts in the listing on the basis of reasonableness or feasibility, which are not further explained, of in-house performance.

Under the provisions of A-76, it would be a fairly simple matter for an agency to shield existing contracts from being subjected to cost comparison using the loopholes I cited. In my own experience, cost comparisons also leave a lot to be desired in some instances.

To summarize, I do not believe, based on examination of contracting-out practices in DOE and my experiences elsewhere, that OMB directives provide adequate assurances that service contracts are in the best interest of the Government or the taxpayers.

It is my hope that OMB will close the loopholes in their present directives. In addition, Congressman Herbert Harris has proposed legislation aimed at achieving the same purposes. However, statutory and regulatory protections are not likely to be perfected and put into force quickly enough to remedy the current situation.

Therefore, I believe that the most effective means of controlling service contract expenses and assuring the best return on the taxpayers' dollars is through authorization, appropriation, and budgeting processes.

I suggest that the subcommittee staff closely examine service contracts at DOE to determine the extent to which service contracting is being used to delegate policy formulation to contractors, to void manpower ceilings, to circumvent salary limitations, and simply to obligate and spend money for which there is no definitized and adequately justified need.

Following this review, much of which has already been accomplished by your staff and the GAO, I would suggest an adjustment in DOE authorizations and appropriations aimed at providing only enough money to finance absolutely necessary and justifiable service contracts.

I should now like to comment on aspects of DOE contract administration which were reviewed by GAO in their November 2, 1979, report. The problem of reviewing and approving contractor cost vouchers for payment is, I believe, a problem common to all agencies of the Federal Government with which I am familiar.

Private businesses usually establish strict controls in this area for the purposes of protecting against collusive fraud, guarding against overpayment or improper payment, and assuring timely and orderly voucher approval and payment.

Private businesses usually try to separate, organizationally, authorities for originating requirements, placing the order—contract or purchase order—certifying satisfactory performance or delivery and, finally, approving payment.

In private business, the authority to approve payment is usually the responsibility of the chief financial officer and is delegated to the accounts payable department. The accounts payable manager can call on audit assistance to resolve any questions which arise as to propriety of payment for vouchers. However, I would like to add that I do not believe it is a sound policy to have the auditors who are supposed to check on things involved in day-to-day operations. I think this tends to hurt their objectivity. They are frequently put in a position of checking on their own work.

These internal control principles and practices should be followed. For those instances, which should be rare exceptions, in which contractor performance or delivery defies objective evaluation, the procedures should require that performance be certified by an executive equivalent in rank to a corporate officer. In the case of a Government department, I would suggest that a statutory official fulfill this role.

This concludes my prepared statement, Mr. Chairman. I will be glad to answer any questions.

Mr. DINGELL. Mr. Fitzgerald, the committee thanks you for your help to the committee and your rather complete, carefully thought-out statement. We have reason to be grateful to you for your assistance over the years, and, again, my particular thanks to you.

Our next witness is Hon. John A. Hewitt, Chief Financial Officer of the Department of Energy.

Mr. Hewitt, it appears you have a problem here, and the Chair would like to observe, possibly to your relief, that you have recently come aboard. We look to you, therefore, as a new broom that sweeps clean. It is our trust that you understand that we do not blame you for that which has grown up over the years inside the Department, but we do not intend to absolve you from a responsibility for correcting the abuses which the subcommittee finds so distressing.

With those remarks, I observe that you can anticipate further hearings on these matters to go forward when the subcommittee has time. You may also anticipate remedial actions being taken on the Department of Energy authorization bill, and I think you can anticipate that unless some appropriate actions are taken, that the chairman of this subcommittee will be offering amendments to your appropriation bill which I believe will find favor in the House on the basis of the directive we have this morning.

So you are recognized at this time for such statement as you wish to give.

STATEMENT OF JOHN A. HEWITT, JR.

Mr. **Hewitt**. Thank you, Mr. Chairman, members of the subcommittee. I am pleased to be here on my first opportunity to testify in front of your subcommittee on clearly what I, too, believe is a very important matter for both of us.

I have now been with the Department of Energy for almost 4 months and have tried to move out on several fronts to correct the management problems that Secretary Duncan and I found in our transition phase.

I would like to submit my prepared statement for the record this morning and simply comment then on a few of the actions that we have taken in this regard since the fall.

Mr. **Dingell**. Without objection, your full statement will appear in the record, and you are recognized for the purpose set forth. [See p. 930.]

Mr. **Hewitt**. Let me say at the outset I think we are still in the process of learning. There is a lot that we are uncovering in the process of digging deeper and deeper into the Department's practices that do require some attention.

But with that somewhat negative statement, let me say on the other side I am generally satisfied that the Department's progress in building a sound and responsible procurement system is well underway. We do have a lot more to do. From my point of view, the GAO, our Inspector General, industry representatives, the Congress, and others can provide very important ways for me to assess our true situation, and in that regard I look forward to this hearing this morning.

While we have more to do, I am anxious to work with your subcommittee as well as the GAO and industry to improve our practices in this area.

In the recent meeting with Dexter Peach, I expressed to him I am trying to insure that we are taking the right corrective action at the right pace, and I am looking for help from others to help me decide whether or not that is true. Within the limits of how much change an organization can make successfully at one time, I am prepared to make adjustments in our game plan as necessary.

I have testifying with me this morning, Mr. Chairman, Mike Tashjian, the Director of Procurement and Contracts Management; Harry Yohalem, Deputy General Counsel for Legal Services—and in your letter you requested Jack Hobbs, our Controller, to join us. He is in the audience today and is prepared to come up as you need him.

I would like to cover three areas, including those things we have specifically done with regard to the GAO report.

First, in the area of support service contracting: Based on my review of issues raised in preparation for a Senate hearing last November, and after reading the GAO report, I concluded that several improvements in policy guidance were needed. Since then, we have been working on corrective actions to fix these problems. Accordingly, Secretary Duncan issued DOE notices earlier this week to provide policy guidance in four areas that I believe needed strengthening. I will provide them for the record.

Mr. **Dingell**. Without objection, those will be inserted in the record at the appropriate place. [See p. 939.]

Mr. **Hewitt**. The first focuses on consulting services and defines procedures for use and justification of consulting services. Here we are trying to get more line management accountability built into defining the need for consulting services as well as the management of contractor efforts once we have the work underway.

The second focuses on the basic functions of management DOE must perform, and specifically defines those functions contractors cannot perform. I must say it is somewhat difficult to go beyond the definitions in OMB circular 78–11, but we have tried to be more specific.

The third deals with the preparation of task assignments and specifically requires DOE employees prepare these task assignments.

The fourth deals with ratification, a matter which we should not tolerate. It identifies contracting officers as the only people authorized to make commitments, but also outlines toughened procedures and increased management attention for ratification of unauthorized contract awards.

We will continue to review the problem in the area of support services and see if additional corrective actions are required.

As Mr. Peach mentioned earlier, I think promulgation of notices, orders, procedures, policies, and so forth, is not enough. We have to work closely with our people, both in the procurement and program office areas, to educate, communicate and inform as to what we are trying to do both in specifics and in our overall efforts.

Let me turn to our quick reaction work order system. As I understand it, the Department's quick reaction work order system has been a subject of interest to the GAO since July of last year. From Mr. Peach's statement, I believe the GAO has now supported the basic structure and need for this system, although I note from your remarks you do not agree. What I do say for certain is that I think there are several things we have to do to improve how we use this contracting vehicle.

I am very well satisfied that the system, itself, does several things for us. It does maximize competition for urgent—and let me underscore "urgent"—work, while alternatives would probably result in more sole-source work as contractors try to meet the urgent need by modifying or establishing new contracts. Improvements are necessary, and I am prepared to immediately implement a new policy that eliminates any further sole-source work orders in this area, and, second, to substantially strengthen the requirement to emphasize the urgency test, one that would satisfy any objective outside review.

We will issue these new policy guidelines in the near future.

Mr. **Dingell**. Would you submit them to the committee when they are made?

Mr. **Hewitt**. Yes, sir.

[The following documents were received for the record:]

UNITED STATES DEPARTMENT OF ENERGY
PROCUREMENT AND CONTRACTS MANAGEMENT DIRECTORATE
OFFICE OF PROCUREMENT OPERATIONS

CONTRACT SPECIALIST'S GUIDE

FLASH

NOTICE

FLASH NOTICE 80-20 (March 13, 1980)

DOE-PO QUICK REACTION WORK ORDER (QRWO) PROCUREMENT SYSTEM

1. REFERENCE

DOE Contract Specialist's Guide Topic 17-1.

2. FLASH NOTICE

a. Effective immediately individual work orders will be awarded as a result of competition among as many QRWO master contract holders in the given area of work as is practicable. Operations' contracting officers shall no longer award individual work orders noncompetitively and shall take the necessary reasonable steps to maximize competition.

b. Modify Topic 17-1 by (1) deleting subparagraph 6a.(8) and renumbering subparagraph 6a.(9) to subparagraph 6a.(8).

3. FILING INSTRUCTIONS

This FLASH NOTICE shall be filed and maintained in DOE-PO Contract Specialist's Guide Topic No. 17-1. This FLASH NOTICE shall remain in effect until rescinded.

4. APPLICABILITY

See Distribution

Authorized by: James A Nelson
James A. Nelson
Director
Contract Support Division
Office of Procurement Operations

DISTRIBUTION

Contract Specialist Guide Topic 1-2
Distribution "A"

Request - Provide detailed information identifying 1) each time Quick Reaction Work Orders (QRWO) have been used since initiated and 2) when QRWOs were used to implement legislation, provide analysis to the President, Congress or OMB and justification for the action taken.

1. Following are the statistics on usage of Quick Reaction Work Orders:

ECONOMIC REGULATORY ADMINISTRATION

YEAR	NO. OF WORK ORDERS
FY 1978 (partial year)	12
FY 1979	23
FY 1980 (as of March)	2
	37

BUILDING & COMMUNITY SYSTEM

FY 1979 (partial year)	1
FY 1980 (as of March)	9
	10

2. Quick Reaction Work Orders used to provide analysis to the President, Congress, or OMB and to implement legislation:

(List attached).

QUICK REACTION AWARDS - ECONOMIC REGULATORY ADMINISTRATION (ERA)

FY 78

CONTRACT NO.		PURPOSE
3226	Analyze adequacy of non-product cost reimbursement to propane retailers.	Legislative Implementation (NEA Rulemaking)
3353	Analysis of the Standby Gas Rationing Plan	Presidential Response - (Mandate to complete plan to submit to Congres
	FY 79	
3337	Identify MBFI's to convert to coal in emergency	Presidential Response
3362	Recommend forms and procedures for FUA cost test	Legislative Implementation (FUA)
3356	Summarize and validate NCEPA & FUA comments; analysis of policy issues re utility conservation programs	Legislative Implementation (NCEPA & FUA)
3336	Assist in designing federal plan; assist in developing criteria and methodology reviewing state plans	Presidential Response - (Exec. Proclamation on energy building temp restrictions)
3327	Develop economic criteria to determine if electric utility can raise capital to convert to coal	Legislative Response (FUA)
3559	Develop list of electric utilities that can burn coal to support exemption of prohibition decisions	Legislative Implementation - (Fuel Use Act)
3347	Identify impediments in each phase of coal fuel cycle, assist DOE in prioritizing initiatives	Presidential Response
3359	Evaluate energy emergency handbook and develop procedures for distribution and updating	Legislative Implementation
3362	Analyze variations in capital market rates of firms affected by FUA	Legislative Implementation

3359	Review and evaluation of public comments of rulings and emergency orders generated by current shortfall of petroleum products	Legislative Implementation (Rulemaking)
3353	Determine if a change in rules for refinery products would allow refiners to recover return on investment	Legislative Implementation - (Rulemaking on refinery investment incentives)
3356	Economic consequences of burning oil or natural gas in new combustion turbines/ combined cycles used as MFBI's	Legislative Implementation (FUA)
3345	Economic analysis of several gasoline pricing alternatives	Legislative Implementation - (Rulemaking in support of administration price regulations)
3336	PURPA Report processing, public comment analysis identify state technical assistance needs	Legislative Implementation - (PURPA hearings)
3373	Study of gas utility rate design	Congressional Response - (Gas utility rate design study)

QUICK REACTION AWARDS - CONSERVATION AND SOLAR

FY 79

CONTRACT NO.		PURPOSE
21319 301	Provide backup support to develop a response to Congress	Congressional Response (Periodic evaluation of a loan program to construct waste-to-energy systems)
21365 003	Historical documentation of the development analysis used in preparation of building energy performance standards	Legislative Implementation
21329 304	Perform program development and analysis of new initiative to conserve energy by rebates on energy efficient appliances	Congressional Response (Respond to Congressional inquiry for developing potential legislated program)

Mr. DINGELL. I trust you will move to get them on line at the earliest possible moment?

Mr. HEWITT. Yes, sir. And we will issue them as DOE notices. The reason these other four policy statements came out as DOE notices in contrast to orders is, it enables us to establish these management principles in an accelerated fashion, and we will do the same in this case.

If I might just turn, then, briefly to a discussion, and you asked for this a moment ago, to the specific issues that were raised by the GAO and what the Department has done in these regards.

With regard to the GAO recommendation on competition, task order contracts, quick-reaction work orders, and so forth, primarily with regard to competition, let me mention four things the department has done.

Deputy Secretary O'Leary last summer issued a strong policy memorandum to the staff, indicating the need for competition. Within the last month, Deputy Secretary Sawhill sponsored a briefing on support service contracts for all the senior executives in the department. This was followed by a detailed critique in each outlay area by Mr. Tashjian. This substantially emphasized the need for increased competition.

Mr. DINGELL. Mr. Hewitt, I am impressed with the issuance of directives, but what are you doing to enforce the directives? It may be a little like what you do here on Earth, you are punished in the hereafter, which may be some distance in the future, and you always hope the folks will forget about it, or in any event you will be able to make your peace before you go there.

What is the enforcement process to insure these directives are carried out? I don't detect that they are self-enforcing.

Mr. HEWITT. If we are talking about competition, the nature of enforcement there is not whether we are able to prepare a sole-source justification. I think what you are really faced with in the main is the principle of getting the Department to do the kind of procurement planning that it has to do in advance so that we can conduct an orderly competition, identify our requirements in advance. This comes about largely through the kind of training program Mr. Peach mentioned.

Mr. DINGELL. Do you have a training program of such kind in place?

Mr. HEWITT. Yes, sir.

Another point——

Mr. DINGELL. Mr. Peach doesn't appear to be delighted with the training program, and I must confess I have some reservations about how well it is working.

Could you tell me when that training program was initiated?

Mr. HEWITT. It was initiated on several fronts, some of which are just now getting underway. A front that is just now getting underway is a meeting that will take place on March 5 that Deputy Secretary Sawhill and I will conduct, bringing in all the Assistant Secretaries and Directors and doing a comprehensive briefing, starting at that level.

In other words, we are not satisfied at all with the kind of training that has gone on in the Department thus far and have an aggressive program mounted now to supplement that which has gone on.

Let me point out that over 300 of our program and project personnel over the last year attended a procurement orientation training program. The outline of that program we are delighted to make available.

Mr. DINGELL. Would you submit when and where it was held?

Mr. HEWITT. Yes, sir. They were across the country. We will be glad to submit the dates, number of attendees, the location, outline of the material, the names, anything that would be desirable.

Mr. DINGELL. I think that would be helpful.

[Testimony resumes on p. 928.]

[The following material was received for the record:]

Request - Provide the date, place, attendees, future schedule and course materials for the project officer Procurement orientation course.

The Procurement and Contracts Management Directorate has developed an orientation course to acquaint program and project officials with the requirements of the procurement process and their procurement responsibilities. In FY 1979, 25 sessions were held in the Washington area for the following officials:

OFFICE	NUMBER OF SESSIONS	TOTAL ATTENDEES
Economic Regulatory Administration (ERA)	2	24
Energy Information Administration (EIA)	3	31
International Affairs (IA)	1	44
Intergovernmental and Institutional Relations (IR)	1	5
Policy & Evaluation (PE)	1	18
Fossil Energy (FE)	2	18
Conservation & Solar Energy (CS)	8	131
Nuclear Energy (NE)	1	15
Environment (EV)	3	42
Strategic Petroleum Reserve Office (SPRO) (PO)	1	60

Thirty sessions are anticipated in FY 1980. The sessions are scheduled on an as needed basis. The Subcommittee staff is invited to attend a session by contracting Mr. Vince Mason, 252-8228, for the next scheduled course and location. Attached are the course outline and handout material.

DOE also offers a five day basic procurement course which is aimed toward people needing a familiarization with the procurement process. In FY 1979 4 sessions were offered to a total of 65 people. For FY 1980 4 sessions are planned.

PROCUREMENT AND ASSISTANCE ORIENTATION

FOR DOE PROJECT OFFICERS

Topic Outline

A. **Objectives of the orientation session.**

B. **Overview of the DOE Procurement and Assistance Activity.**

   1. **Summary of DOE Award Activity.**

   2. **Organization of the DOE Procurement Function.**

      a. **Procurement office role in facilitating program objectives.**

      b. **Headquarters/field office roles and relationships.**

      c. **Role of Headquarters Program Support Office.**

   3. **Procurement and Assistance Regulations.**

      a. **Difference between procurement and assistance awards.**

      b. **Regulations applicable to DOE Procurement contracts.**

      c. **Regulations applicable to DOE Assistance Awards.**

      d. **Similarities between procurement and assistance in terms of the solicitation and award process.**

   4. **Flexibility of the Procurement and Assistance Regulations.**

      a. **How the procurement and assistance process can serve program goals.**

      b. **Problems in the award process can be prevented by:**

         (1) **Defining the objective of the expenditure.**

         (2) **Selecting the method of solicitation and type of award that is appropriate to the defined objective.**

C. **Methods of Procurement and types of Award Instruments.**

  1. **Negotiation versus formal advertising.**

    a. **Formal advertising process.**

      (1) **Criteria for formal advertising.**

      (2) **Basis for selection and award.**

      (3) **Type of award instrument.**

    b. **Negotiation process.**

      (1) **Criteria for negotiation.**

      (2) **Solicitation and award process.**

      (3) **Types of resulting award instruments.**

  2. **Types of contracts and assistance instruments.**

    a. **Characteristics of contract types.**

      (1) **Firm fixed price.**

      (2) **Cost reimbursement.**

    b. **Characteristics of Assistance Awards.**

      (1) **Grants.**

      (2) **Cooperative agreements.**

D. **Procurement/Assistance leadtime..**

  1. **Factors which influence leadtime.**

  2. **Project officer actions which can reduce leadtime.**

  3. **Steps in the process of solicitation, negotiation and award.**

E. **The roles of contracting officers and project officers in the solicitation and award process.**

  1. **Contracting officer roles.**

  2. **Project officer roles.**

F. Technical evaluations by DOE project officers.

  1. Evaluation criteria considerations.

  2. Objective of the technical evaluation process.

  3. The evaluation and selection process.

  4. Technical evaluations of cost proposals.

    a. The significance of the technical evaluation of proposed cost.

    b. The items to be addressed in the technical evaluation of proposed cost.

G. Noncompetitive procurement.

  1. Benefits of competition and DOE philosophy.

  2. Legitimate bases for noncompetitive procurement.

  3. Noncompetitive justification content.

H. Unsolicited proposals.

  1. DOE philosophy on unsolicited proposals.

  2. Advance contact with offerors and abuse of the unsolicited proposal process.

  3. Justification for acceptance of unsolicited proposals.

I. Procurement request preparation.

  1. Components of the procurement request.

  2. The procurement plan.

    a. The significance of the procurement plan.

    b. Procurement plan contents.

  3. The Statement of Work.

    a. Purpose and significance in the solicitation and contract.

    b. Guidance for Statement of Work preparation.

J. Contract modification.

1. Types of modifications.

   a. Increased scope.

   b. Changes under the "changes clause."

   c. Administrative modifications.

2. Modification process and procedures.

3. Roles of contracting officers and project officers in contract modification.

K. Responsibilities of the project officer.

1. Preaward.

2. Post award.

L. Support Service Contracts

1. DOE Philosophy

2. Applicable Management Directives

3. Abuses of Support Service Contracting

M. Special topics.

1. Preprocurement planning.

2. Reporting Requirements.

3. Contract Financing.

4. Special DOE solicitation types.

   a. Program opportunity notice.

   b. Program research and development announcement.

   c. Notice of program interest.

5. Precontract costs and letter contracts.

6. Ratification of unauthorized commitments.

7. Organizational conflict of interest.

HANDOUT MATERIALS
for DOE Project officers

Procurement Orientation Course

TYPES OF CONTRACTS AVAILABLE FOR USE BY DOE

There are numerous types of contracts which are used by the DOE. They fall generally into two broad types. The following is a description of these two general types of contracts, their characteristics, the types of transactions to which they are appropriate and a brief discussion of the variations which are possible within the general contract type.

1. Firm Fixed Price (FFP) Contracts.

This contract type provides for the payment of a fixed dollar amount upon delivery of a specific item or service. It would be used in a case in which the deliverable item could be described in a detailed design or performance specification or by reference to manufacturer's part number. It is generally suited to the purchase of supplies, materials, construction, "off-the-shelf" items, or services in which the unit of service is quantifiable. It generally permits or requires little if any technical guidance or in-process surveillance by the Government. The fixed price contract involves substantial risk to the contractor since the contractor will be reimbursed no more than the contract amount even though his cost of performance may exceed the contract amount.

2. Cost Reimbursement Contracts.

This type of contract involves an estimate of the cost of performance. It provides for the payment of the actual allowable cost incurred by the contract or subject to the stipulation that: the Government is not obligated to pay costs in excess of the estimated cost; the contractor is not obliged to incur costs in excess of the estimated cost. The estimated cost can be adjusted, upward or downward, to accommodate actual costs which differ from the initial estimate of cost.

The cost reimbursement contract type minimizes the risk of the contractor. This type of contract would only be used when the cost of performance cannot be estimated with sufficient certainty to permit use of fixed price contract. Research, developmental, study efforts, and complex long leadtime construction are examples of efforts that necessitate the use of cost reimbursement contracts.

The description of the contractor's obligation in a cost reimbursement contract would generally consist of an enumeration of tasks to be performed and objectives to be achieved. The Government has, in such a contract, the right as well as the responsibility to perform technical performance surveillance and cost/schedule surveillance and to give technical guidance and direction to the contractor.

There are several variations of cost reimbursement contracts in terms of the profit or fee associated with the contract. These include:

a. Cost shared contracts in which no fee is paid and in which the contractor bears a portion of the cost of performance. Cost sharing involves joint sponsorship of an effort in which there is mutual benefit to the Government and the contractor.

b. Cost only contracts with nonprofit deriving organizations such as educational institutions.

c. Cost plus fixed fee (CPFF) contracts in which the fee is established at the outset and does not vary as a result of costs actually incurred.

d. Cost plus incentive fee (CPIF) contracts in which the fee earned is a function of the contractor's success in meeting specific targets in terms of cost, schedule or technical performance.

e. Cost plus award fee (CPAF) contracts in which the fee earned is determined based on periodic subjective evaluations of the contractor's performance in connection with fee established performance criteria.

The table which follows as page 3 dipicts a range of contract types as a function of: the specificity with which work must be described; the extent of Government surveillance or guidance required.

RANGE OF CONTRACT TYPES

Firm Fixed Price Fixed Price with escalation	Cost Reimbursement Completion Type CPFF CPAF Cost	Cost Reimbursement Level of Effort w/out Task Orders CPFF CPAF Cost	Cost Reimbursement Task Order Level of Effort CPFF CPAF COST

SPECIFICITY OF WORK DESCRIPTION

Detailed Design of performance specification	Detailed enumeration of tasks to be performed or objectives to be achieved	General description of work to be performed	General description of types of work for which task orders may be issued

EXTENT OF GOVERNMENT SURVEILLANCE AND GUIDANCE REQUIRED OR PERMITTED

Virtually none	-technical milestone surveillance -cost surveillance -general technical direction	-detailed performance surveillance -cost surveillance -more specific technical direction	-detailed performance surveillance -cost surveillance -each item of work detailed by written task orders

NONCOMPETITIVE JUSTIFICATION AND JUSTIFICATIONS FOR ACCEPTANCE OF UNSOLICITED PROPOSALS

The Federal Procurement Regulations and the statutes relating to the award of Federal Contracts and Assistance place significant emphasis on the need for competition in the expenditure of Federal funds. The DOE procurement regulations stipulate that awards shall be made competitively to maximum extent possible.

Competition in the award of Government contracts is, thus, viewed as the norm. Any DOE award which does not involve competition requires the preparation of a formal decision document which substantiates the basis for the decision not to secure competition. This decision document is required in the case of noncompetitive procurement initiated by DOE and in connection with the acceptance of unsolicited proposals, which are viewed as a special class of noncompetitive procurement.

The decision not to secure competition becomes a matter of official record and is subject to dispute, after the fact, by interested third parties and by the General Accounting Office (GAO).

There are two general situations in which the GAO has sanctioned the initiation of noncompetitive procurements by Government agencies. These are:

1. Situations in which only one firm is capable of providing a needed product or service consistent with schedules which cannot be relaxed.

2. Situations in which only one firm can provide a needed product or service of the type or quality required by the Government.

The GAO has been unsupportive of noncompetitive procurements which are based on speculation that a single firm has the capability of providing a product or service at a reasonable price. It is argued that such speculation should be proven through the competitive process. Similarly, the GAO has been critical of noncompetitive procurements which are based on the delays incident to competition when the requirement could have reasonably been anticipated so as to permit competition.

Noncompetitive awards resulting from proposals which were unsolicited (submitted at the sole initiative of the offeror) are deemed legitimate if the proposal offers unique or novel ideas, solutions, or approaches. The lack of competition in such instances is based on the principle of law that such unique ideas have property value which should not be violated. The right to accept such proposals without competition does not extend to situations in which:

1. The proposal offers the providing of products or services for which the Government could have anticipated a specific need.

2. The proposal offers the providing of a service which does not involve unique ideas and which would be the subject of a competitive solicitation.

3. The proposal was submitted at the request of a DOE employee.

The Justification for Noncompetitive Procurement or for the Acceptance of Unsolicited Proposals takes the form of a recommendation from the initiator to the contracting officer with concurrences and approvals as a function of the value of the award action. The required content of and the review and approval levels associated with Noncompetitive Justifications and Justifications for Acceptance of Unsolicited Proposals are identified on page 6 as follows.

Noncompetitive Justification

Application: All single source procurements over $500 not based on unsolicited proposal.

Regulation Citation: DOE-PR 9-3.805-51.

Content of Justification.

1. Brief Description of Supplies or Services to be purchased.
2. Procurement History, and Estimated Future Requirements.
   - Evolution of the action.
   - Continuation of ongoing effort.
   - Actions taken to secure competition.
3. Estimated Cost.
   - Estimated cost by FY.
   - Basis for costs estimate.
   - How cost would be affected by selection of another source.
4. Schedule Requirements.
   - Identification of any program schedule considerations which preclude competition.
   - Identification of why only the recommended source can meet schedules.
5. Exclusive Capabilities of the source recommended.
   - Unique qualifications of the personnel.
   - Unique prior experience of the firm.
   - Specialized facilities or test equipment.
   - Patents, copyrights, or proprietary data which precludes competition.
   - Other specialized capabilities of the recommended source which clearly make it the only one capable of performing the work consistent with schedule and without unreasonable costs.

Review and Approval Levels.

$ Value of Award	Concur	Approval
$500 - $1M	PROC Director or designee	Sr. Program official or designee
$1M - $5M	General Counsel, PROC Director or designee	Sr. Program official or designee
$1M - $50M	General Counsel, PROC Director or designee	Sr. Program official
Over $50M	General Counsel, PROC Director	Secretary, Under Secretary or Deputy Secretary

Justification for Acceptance of Unsolicited Proposals

(Other than Educational Institutions)

Application: All unsolicited proposals (including renewal proposals) except those from Educational Institutions and other not-for-profit institutions (such as research hospitals, charitable institutions, and local government authorities) operating under Special Research Contracts.

Regulation Citation:
DOE-PR 9-4.900 for Contracts
DOE-AR-10-600.34 for Grants & Cooperative Agreements

Contents of Justification.

1. **Evaluation Factors.**
   a. Unique, innovative or meritorious methods, approaches, or ideas which were originated by the offeror and are embodied in the proposal.
   b. Scientific, technical, or socioeconomic merit of the proposed effort.
   c. Contribution which the proposed effort is expected to make to the Department's specific mission.
   d. Capabilities, experience, facilities or techniques offered which are needed in achieving objectives.
   e. Qualifications, capabilities and experience of personnel which are needed in achieving objectives.

2. **Determinations** (to be supported by substantiating narrative).
   a. That the proposal was submitted solely at the proposers own initiative.
   b. (For Contracts)-That the proposal is to explore a method, approach or idea or carry out an initial development in support of DOE's mission which:
      (1) Does not duplicate work currently being performed or contemplated by DOE; and
      (2) Is not already known by DOE; or
      (3) Has merit or value not previously recognized.
   c. (For Financial Assistance)-The proposal is relevant to a public purpose of support or stimulation authorized by program legislation (refer to DOE-AR 10-600.34 for criteria).

Review and Approval Levels.

$ Value of Award	Concur	Approval
$500 - $1M	PROC Director or designee	Sr. Program official or designee
$1M - $5M	General Counsel, PROC Director or designee	Sr. Progra official or designee
$5M - $50M	General Counsel, PROC Director or designee	Sr. Program official
Over $50M	General Counsel, PROC Director	Secretary, Under Secretary or Deputy Secretary

(7)

Unsolicited Proposals From Educational Institutions

(and certain not-for-profit organizations)

Application: Unsolicited proposals from Educational Institutions (and not-for-profit organizations) when the proposal is to result in award or renewal of a Special Research Contract (SRC).

Regulation Citation: DOE-PR 9-4.5100.

Procedural Differences from Regulations Applicable to Proposals from Profit Making Organizations.

1. Documentation of Decision to Accept Proposal.

   No specific format is required by DOE-PR 9-4.5100 for approval of the decision to accept a University proposal.

2. Approvals and Concurrences.

   Headquarters Senior Program Officials (or their designees) are responsible for selecting and approving unsolicited University proposals. DOE-PR 9-4.5100 does not require any concurrences in such approvals.

   Letter notification of the decision to accept or reject a proposal is to be made by the Program Office which reviews the proposal. In the event of approval, the letter shall: advise that the proposal has been accepted subject to completion of satisfactory contract; identify the DOE Procurement Office that will negotiate and execute the contract; and stipulate that DOE assumes no obligation until a contract has been executed. A copy of the approval letter shall accompany the Procurement Request Form which is transmitted to the Procurement Office.

PROCUREMENT LEADTIME

Procurement leadtime is a term which describes the interval from receipt by a procurement office of a complete procurement request until award of a contract. The amount of time necessary for the award of a Government contract varies as a function of factors such as:

1. The dollar value of the action.

2. The extent of competition.

3. The complexity of the transaction.

4. The existing workload of the procurement office.

DOE Project Officers are participants in the award process from the initial definition of a requirement through the negotiation and award of the contract. As such, there are a number of steps which can be taken by Project Officers to reduce the interval between receipt of a procurement request and award of a contract. These include:

1. Communication with the Contracting Officer in advance of procurement request preparation.

2. Care in definition of the requirement and preparation of Work Statements.

3. Preparation of a Procurement Plan which provides the Contracting Officer with all information needed for solicitation and award.

4. Early Fiscal Year initiation of procurements.

5. Planning the aggregation of like requirements and effective use of multiyear contracts.

6. Expeditious evaluation of proposals.

The two charts which appear as pages 10 and 11 depict typical leadtimes for competitive and noncompetitive procurements under $5 million in award value. The major events during the award process and the actions which must occur between these events are identified.

LEADTIME FOR CONTRACT AWARD

- Noncompetitive Procurements under $5M

Calendar Days from P.R. Receipt	Events	Days Between Events	Actions Required
0	Receipt of Procurement Request		
		20	- Synopsis - RFP preparation - RFP review and approval
20	Solicitation Issued		
		30	- Preparation of Proposal by Contractor
50	Receipt of Proposal		
		20	- Evaluation of Technical Proposal - Technical Evaluation of Cost Proposal - Cost Analysis and Audit - Proposal revision (if necessary)
70	Begin Negotiations		
		20	- Clarification of Proposal - Discussion of Contract Terms and Work Statement - Agreement on Contract Amount
90	Negotiations Concluded and Agreement Reached		
		17	- Contract Preparation - Legal and other reviews - Contract Reproduction
117	Contract mailed for signature		
		13	- Review of Contract by Contractor - Signature by Contractor and return to Contracting Officer
130	Award of Contract		

LEADTIME FOR CONTRACT AWARD

- Competitive Procurements under $5M

Calendar Days from P.R. Receipt	Events	Days Between Events	Actions Required
0	Receipt of Procurement Request		
		25	- Synopsis - RFP preparation - RFP review and approval
25	Solicitation Issued		
		35	- Preproposal Conference (if any) - Preparation of Proposals by Offerors
60	Proposals Received		
		30	- Evaluation of Technical Proposals - Establish Competitive Range - Discussions with offerors in Competitive Range - Preparation and Submission of Final Offers - Evaluate Final Offers and Select Contractor - Evaluation of Cost Proposal - Cost Analysis and Audit
90	Begin Negotiation with Contractor Selected		
		30	- Discussion of Contract Terms and Work Satement - Negotiation of Contract Amount
120	Negotiations Concluded and Agreement Reached		
		17	- Contract Preparation - Legal and other reviews - Contract Reproduction
137	Contract Mailed for Signature		
		13	- Review of Contract by Contractor - Signature by Contractor and return to Contracting Officer
150	Award of Contract		

PREPARATION OF TECHNICAL EVALUATION CRITERIA AND CONDUCT OF TECHNICAL EVALUATIONS

A. Consideration in Preparation of Technical Evaluation Criteria.

Evaluation criteria are the measurement standards to be applied consistently and uniformly in assessing the merits of each proposal submitted in response to a DOE Request for Proposals. The criteria are included in the solicitation to provide proposers with an understanding as to what is considered most important in order that they may prepare successful offers. Proposers have the right to expect that their proposals will be scored using only those criteria stated in the solicitation and no others. It is extremely important, therefore, that the development of these criteria be tailored carefully to reflect a consideration of what is required by the solicitation as a technical proposal and the way in which resulting submissions will be evaluated.

In developing technical evaluation criteria consider the following:

1. **The evaluation criteria serve as the standard against which the proposals will be measured. The evaluation criteria will be used to determine which proposals are technically unacceptable and not worthy of further consideration and which proposals are acceptable or capable of being upgraded to an acceptable level.**
2. **Offerors should be able to understand from the stated criteria and relative weightings not only how they will be evaluated, but what their expected scores will be, based on their own independent assessment. Remember that this assessment may be the basis for a decision to propose or not to propose on the requirements expressed in a solicitation.**
3. **Criteria and weightings should be developed on a case-by-case basis, with each criterion having a demonstrable and important relationship to the salient features of the procurement as reflected in the Statement of Work.**
4. **The evaluation criteria are a measurement device. The criteria and their relative weightings should be tailored to the requirement to which proposers are expected to respond. The criteria will influence the nature of the information provided in proposals. They should be a clear and unambiguous statement of the factors which the Government deems important in contractor selection.**

B. Conduct of the Technical Evaluation.

Upon receipt of proposals the Contracting Officer will provide copies of the technical proposals to the proposal evaluators. Cost and/or business proposals will be retained for evaluation by the Contracting Officer or assigned business evaluation panel.

Initial reviews of the technical proposals are conducted to screen out those which are so nonresponsive to the requirement as to remove them from further consideration. Examples of such deficiencies are the offer of an approach previously found unworkable or the offer of an effort which is inconsistent with the stated objectives of the solicitation.

Following the initial review for responsiveness, each responsive proposal will be evaluated in accordance with the evaluation criteria and scoring plan included in the solicitation. It is extremely important that all evaluations be based on these common criteria. The imposition of different or additional criteria will render the evaluation process defective and subject the resultant award to protest by unsuccessful offerors.

The resulting technical evaluation will identify proposals which are: acceptable; capable of being upgraded to an acceptable level through negotiation; or totally unacceptable. The written evaluation will normally include:

1. A scoring matrix identifying the numerical score achieved by each proposal on each evaluation criteria element.
2. A narrative section which identifies the deficiencies, weaknesses, or superior features of each proposal with respect to the stated evaluation criteria elements.

CONTENTS OF THE PROCUREMENT OR ASSISTANCE PLAN

A procurement request and associated documents communicate to the Contracting Officer information needed in the preparation of the solicitation, the conduct of negotiations, and the award of the procurement or assistance instrument. There are many items of information which if not communicated will result in problems and or delays in the award process. It is, for example, necessary that the Project Officer identify the type of contract or award instrument deemed appropriate to the requirement. The Contracting Officer will require, for purposes of negotiation, instructions concerning any special terms or conditions which the initiator wants included in the award instrument. Such instruction might involve reporting requirements, patent or data rights, access to Government property or data during performance, the needed award schedule, lists of recommended sources, or the need for proposal conferences with potential offerors.

The information which the Contracting Officer requires to adequately serve program objectives should be communicated in writing as part of the procurement request. Project Officers will find it helpful to provide such information in the form of a Procurement or Assistance Plan which accompanies the procurement request.

Attached as pages 15 through 16 is an outline of a Procurement or Assistance Plan which may be used in the preparation of requirement documents. The items identified in this outline should be addressed in the Procurement or Assistance Plau to the extent applicable.

Procurement/Assistance Plan Contents

1. **Brief Description of Work to be Performed.**

   - A one paragraph summary, suitable for use in Commerce Business Daily synopsis.

2. **Estimated Period of Performance.**

   - Desired award date.
   - Performance period in months.
   - Any interim performance milestones to be included in award instruments.

3. **Estimated Cost.**

   - Total estimated cost of the work to be performed.
   - Explanation of basis for Government estimate.
   - An evaluation of the reasonableness of the elements of proposed cost (if an unsolicited proposal has been received and accompanies the procurement request).
   - If contract is to be funded in increments, the estimated costs per FY.

4. **Type of Contract or Assistance Award Recommended.**

5. **Responsible Technical Officer.**

   - Name, Mailing Address and Telephone Number of the DOE Project Officer who will be responsible for monitoring technical performance.

6. **Statement of Work.**

   - Include as an attachment.

7. **Reporting Requirements.**

   - Include reporting requirements checklist and distribution sheet as attachment in accordance with DOE Uniform Contracts Reporting Guidelines (UCRG).
   - Identify any special deliverable data required.

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8. **Suggested Sources.**

   - **Competitive Actions.**

     - Attach a list of names and addresses of suggested sources.

   - **Noncompetitive Actions.**

     - Identify the name and address of the suggested source.

     - Attach approved Noncompetitive Justification or Justification for Acceptance of Unsolicited Proposal (as appropriate).

9. **Evaluation Criteria** (competitive actions only).

   - Attach proposed technical evaluation criteria.

   - Identify the proposed scoring weights for the criteria elements.

10. **Government Property, Data, or Facilities.**

    - Identify the type and quantity Government-furnished property, data, or facilities, if any, that the awardee will require for performance of the effort.

    - Indicate the schedule of availability of such property or facilities.

    - Disposition instructions for any property which the awardee is expected to acquire at Government expense under the contract.

    - The planned schedule of availability of such property or facilities.

11. **Special Instructions.**

    - Include any special instructions or additional information which the Contracts Office might need in preparing the solicitation or award instrument.

    Examples:

    - Special security or clearance requirements.

    - Special instructions on structuring of cost or technical proposals.

    - Prequalification criteria.

    - Special conflict of interest considerations.

    - Special data requirements.

    - Special patent considerations.

    - Need for preproposal conference.

PREPARATION OF STATEMENT OF WORK (SOW)

The Statement of Work serves two separate and very important purposes in a negotiated procurement. In the solicitation it communicates to potential proposers the nature of the Government requirement. In the award instrument it constitutes the definition of the awardee's performance obligation.

Because of the purposes served by the Statement of Work, it is perhaps the most important document in a negotiated procurement.

A Statement of Work which is clearly written will allow proposers to understand the Government requirement and respond with detailed plans and approaches for accomplishment of the tasks specified. A well written Statement of Work will allow proposers to make reasonable estimates of the resources which will be required to satisfy the Government's requirement. Poorly written Statements of Work are misleading to proposers and present a poor image of the Department to the Industrial and University community. When the Government's requirement is not clearly identified, the award process is delayed by the need for lengthy negotiations to clarify the requirement.

The Statement of Work should clearly define the performance obligation of the awardee. Numerous problems are created by Statements of Work which do not meet this criteria. These problems include: wasted expenditures for work not desired by the Government; disputes between the parties concerning what constitutes satisfaction of the performance milestones; and disagreements about the methodology to be employed in performing the work.

Statements of Work vary from simple statements of objectives to complex statements of performance requirements. Regardless of their simplicity or complexity, certain general principles apply to all of them. First, they must be neither so narrow as to restrict the contractor's efforts nor so broad as to permit the contractor to explore areas having little relationship to the particular work. Second, they must define the contractor's obligations and should be definitive enough to protect the Government's interests. Finally, a contractor taking ultimate direction from the SOW alone should be able to perform the required work.

Examples of common deficiencies in Statements of Work include:

1. Lack of appropriate specificity in the description of the tasks to be performed.

2. Failure to identify the objectives or technical problem toward which the efforts are to be directed.

3. Inconsistent and/or conflicting use of terminology.

4. Use of abstract phrases which do not impose binding obligations.

5. Performance obligations which are dependent on actions of third parties, not party to the award.

6. Failure to clearly distinguish the relative responsibilities of the Government and the awardee.

Disputes concerning contract performance will be arbitrated by third parties. For this reason, the Statement of Work should be written for reading by an independent third party. A few examples of techniques which aid in third party understanding of the Statement of Work are:

1. Consistent use of a term. It is confusing if terms such as "data collection," "field sampling," and "surveys" are used interchangeably. The same word or phrase should be used consistently to convey the same meaning.
2. Mandatory and permissive language should be used properly. Whenever a binding provision is to be expressed, use the word "shall" rather than "may," "will," or "should."
3. Abbreviations should be used only after first being defined.
4. Define who is responsible. The term "samples shall be selected for analysis" raises the question, selected by whom--the Contractor or the Government.
5. Use short sentences with simple and concise language.
6. When preparing Statements of Work for contract modifications or follow-on contracts, remember that each Statement of Work must be able to stand alone as an expression of the Contractor's obligation.

Attached as pages 19 and 20 is a checklist which may be helpful in the preparation of and in the evaluation of the adequacy of Statements of Work. It is suggested that DOE Project Officers review this checklist in connection with each Statement of Work they prepare.

Checklist for Statement of Work Preparation

A. Prepreparation Analysis.

1. What is the objective of the work to be performed?

2. What is the nature of the work to be performed?

3. What methods will be used in performing the work?

4. What background information and/or data will be needed by potential proposers?

5. How will satisfactory completion of the work be determined?

6. Are there any performance objectives to which performance incentives should be applied?

7. Can the work be performed in sequential phases? If so, would phasing of the work be logical?

B. Contents.

1. Have the following been included, as appropriate?

   (a) Relevant background information or data which would be needed to understand the requirement and prepare an acceptable proposal (these should be as attachments to rather than incorporated in the Statement of Work).

   (b) A Statement of the overall objectives to be achieved or the technical problem to be solved.

   (c) A clear description of the specific tasks to be performed by the contractor.

2. Is the description of the tasks sufficiently specific to permit the manpower resources, equipment, special facilities, subcontracts, or other necessary costs of performance to be estimated with reasonable certainty?

3. Has the Statement of Work been developed to facilitate the estimate of costs by task or phase of work?

4. Is the work described so as to permit an independent third party to determine whether or not the contractor has satisfied his contract obligation?

5. Have conflicting Statements and ambiguous phaseology been eliminated? (Avoid such words as "about," "nearly," "etc.," and "approximately."

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If variation from a performance requirement is permissible, state the tolerance.)

6. Is consistent use made of terminology? (The same word or phrase should be used whenever the same meaning is to be conveyed.)

7. If the contract is for the initial phase of a multiple phase effort, will the data to be delivered be sufficient to permit competition in subsequent phases?

8. If the Contractor is to furnish designs, drawings or specifications, have the desired form, content and level of detail been specified?

9. If the Contractor is to develop, fabricate, or test hardware:

(a) Have applicable specifications been included in end item descriptions?

(b) Have possible conflicts between design and performance specifications been eliminated?

(c) Are testing methods and procedures clearly described?

Mr. DINGELL. At this meeting on March 5, who is going to be there? Are the officers, themselves, going to be there, or will they send delegates? My judgment is folks tend to send delegates.

Mr. HEWITT. Let me mention that roughly 5 or 6 weeks ago, at his weekly staff meeting, the Secretary made it very clear that at these sorts of management-oriented meetings, that he wanted the principals to attend. He said that if they were going to send delegates, they had to send him a personal note to that effect.

Mr. DINGELL. I am sure it would be all right if I were to send a delegate down there to see how it is going.

Mr. HEWITT. We would be delighted to have somebody sit in.

Mr. DINGELL. Very well. You may proceed.

Mr. HEWITT. We are nearly at the point, March 31, of issuing an order that does emphasize the need for competition, and one thing that order requires is for an Assistant Secretary to approve any sole-source requirement over $10,000.

There are some other things, but I will skip those at this time.

With regard to specific guidelines to more explicitly delineate the types of management tasks which we find acceptable for the contractors to perform, that was a specific recommendation; we have promulgated such a notice which was already submitted for the record.

In the area of contract administration, contracting officers do maintain administrative control over contracts in the areas of voucher approval and contract monitoring. The technical monitoring is a responsibility of the program officers.

Some of these processes, however, are current changes. It was only late last year that we arranged to have the Defense Contract Audit Agency put in position to review all provisional cost vouchers, and it was the middle of last summer we used the Defense Contract Administrative Service for a substantial portion of the contract management function.

I have talked about the training program, and that recommendation. Finally, let me just say, with respect to the recommendation regarding the review of contracting policies and practices, there was a procurement study that was initiated by Secretary Schlesinger and completed in December of 1979. I have taken that in as an input, if you will, to a study I have underway, coupling that with the GAO report, other Inspector General reports, and I have an aggressive effort mounted which will be completed late this spring.

We will be pleased to respond to questions, sir.

[Testimony resumes on p. 949.]

[Mr. Hewitt's prepared statement and attachments follow:]

STATEMENT BY JOHN A. HEWITT, JR., CHIEF FINANCIAL OFFICER
DEPARTMENT OF ENERGY

I appreciate the opportunity to appear before you to discuss the Department of Energy's contracting policies and practices. I would like to address today both the concerns you have expressed in recent letters to the Department, and those concerns raised by the General Accounting Office in a November 2, 1979 report. With me are Mike Tashjian, Director of Procurement and Contracts Management; Jack Hobbs, the DOE Controller; and Harry Yohalem, Deputy General Counsel for Legal Services.

My prepared remarks will cover three areas of interest to this Subcommittee: (1) efforts by the Department to strengthen support service contracting policies and practices; (2) an explanation of the Quick Reaction Work Order System; and (3) steps taken to avoid organizational conflicts of interest with DOE contractors.

Support Service Contracting

I would first like to address Departmental policy regarding support service contracts, including consulting services, and our efforts to gain more control over their use. I initiated last Fall a review of the Department's policies and procedures concerning checks and balances for support service contracting. I concluded that the Department had acted aggressively, but that there was room for improvement. In particular, I decided that the Department should implement a more rigorous review process to ensure that DOE does not abdicate its governmental responsibilities by using contractors, whether they are called support service contractors or consulting service contractors, to perform tasks that DOE should be performing.

As a result of that decision, I have issued as DOE Notices two directives which impose stricter management control before a contract is awarded. As a result of the first directive, the DOE program manager requesting consulting services will have to document that these services are not basic management functions. To provide a check on the program manager, we will continue to require that a person at the Assistant Secretary level also review all requests for support service contracts. In addition, the Director of Administration will review all requests for support services in excess of $250,000, as he presently does, and all requests for consulting services in excess of $100,000 - a new review requirement. The Director of Administration will be particularly sensitive to any request that appears to involve contractors in the performance of basic DOE management functions.

The second directive states that DOE employees must perform the basic functions of management and lists a series of functions that DOE employees, not contractors, should perform. The purpose of this directive is to assure control over the conduct of DOE programs, and complies with GAO's recommendation that DOE establish specific guidelines to more explicitly delineate the types of management tasks which are not acceptable for contractors to perform.

These directives have been published in final form, and I would be pleased to provide copies to this Subcommittee at this time. The new directives should go a long way towards helping our managers gain better control over support service contracts. I intend to monitor their effectiveness over the coming months and if changes are in order, I can assure you that I will act to make those changes promptly.

Quick Reaction Work Order System

I would next like to address the Department's use of Quick Reaction Work Order Master Contracts. I will briefly describe the contractual instrument, point out the unique Departmental needs that this instrument is intended to meet, and describe what we have done to assure appropriate checks and balances in the use of this procurement instrument.

As you are aware, the validity of a Quick Reaction Work Order System as used at the Department of Energy has been the subject of a dialogue between GAO and the Department of Energy begun in July of last year. Copies of the exchange of correspondence between DOE and the GAO on this subject have been furnished to your staff. I also understand the Comptroller General of the United States will soon issue a formal opinion which should bring some resolution to this issue.

The present Quick Reaction Work Order System consists of our awarding, as a result of a competitive solicitation, a given number of master contracts in each area of work described generically in our solicitation. The award of the master contracts is a result of full and free competition, and provides a binding contract under which the contractor agrees to provide a bona fide proposal in response to each individual work order solicitation received during the term of the contract--generally for one year with one or two one year options. Follow-on solicitations for specific work order requirements are then generally competed among three or more of the master contract holders, with awards for the individual work orders being primarily made on the basis of lowest price.

This system provides a viable and efficient contracting vehicle to execute a series of related, urgent requirements. The system is based on sound and accepted procurement principles, and provides a responsible method of assuring competition in an environment which otherwise lends itself to noncompetitive procurements.

I would like to give some definition to the word "urgency" as it is used in this context. All of the quick reaction contracts presently support the work of the Energy Regulatory Administration or the Building and Community Systems Division of the Assistant Secretary for Conservation and Solar Energy. Both program areas have been responsible for rapidly implementing significant new pieces of legislation, and are subject to frequent, urgent requests for analysis from the Congress, the President, and the Office of Management and Budget. With the Quick Reaction Work Order System, we are better able to use a competitive solicitation among the master contract holders, and obtain the required deliverable within the time allowed for completion.

Organizational Conflicts of Interest

I would now like to report on progress in the area of Organizational Conflicts of Interest. In carrying out its responsibilities, the Department must assure itself that it receives unbiased, impartial, and technically sound advice and services from its contractors. The Department's Organizational Conflicts of Interest regulations were developed in order to obtain this assurance. The final regulations were issued January 11, 1979, and amended on March 6, 1979 — primarily, I am told, as a result of hearings before your Subcommittee last year. These amendments emphasized that the regulations must be applied to the Department's regulatory activities.

In order to be certain of the prompt and proper implementation of these regulations, the procurement staff has conducted seminars at each of DOE's major buying offices throughout the country, and all appropriate field office managers have been thoroughly briefed on the subject.

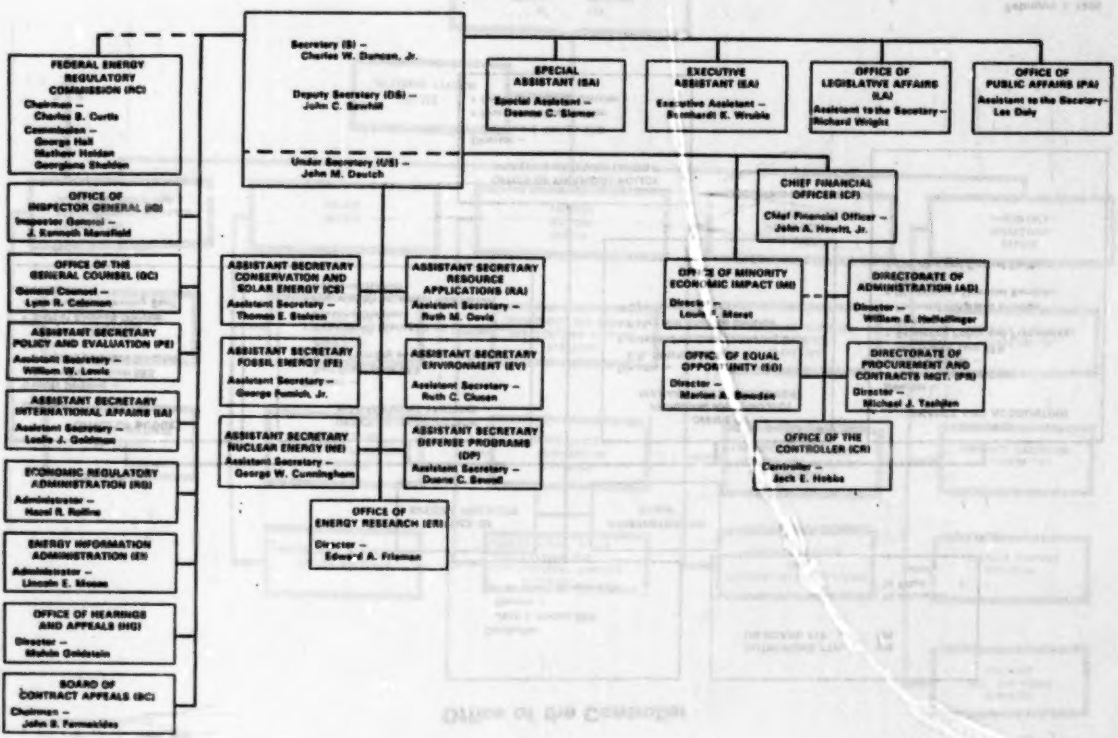
The General Accounting Office has also reviewed the DOE conflict of interest regulations. While the GAO stated last spring they could not form an opinion as to the effectiveness of the regulations because of the short time in which they had been applicable, they reported in July 1979 that the current regulation contains significant improvements over the old regulation. I might add parenthetically that we are working closely with the Office of Federal Procurement Policy to develop conflict of interest regulations which would be applicable to all federal agencies.

We believe that the DOE regulation was a significant step to avoiding organizational conflicts of interest. Along with its implementation, we are continuing to refine the administrative mechanisms and expect to issue in the immediate future a new DOE directive governing internal processing of organizational conflicts of interest issues.

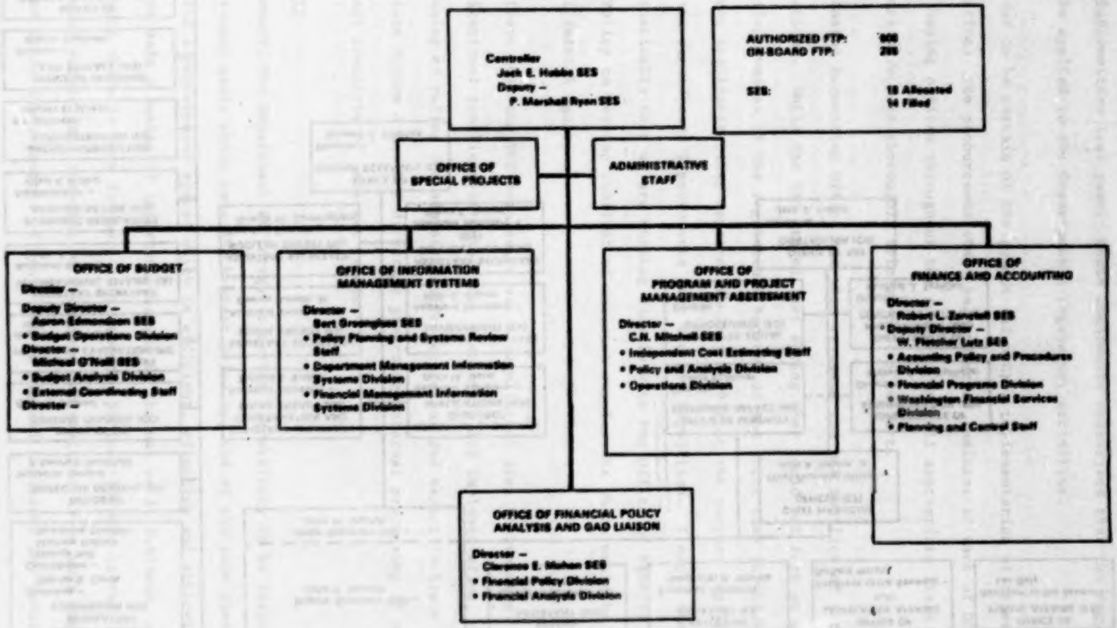
Summary

In summary, the Department of Energy is moving aggressively to be responsive to national needs which have the highest priority, and at the same time maintain a procurement system which is efficient, effective and ethical. We have made a number of important changes in the way we do business, and I am sure there is room for more improvement. We look forward to the continued support and cooperation from this Subcommittee as we work together to make those improvements. I would now be pleased to answer any questions you may have.

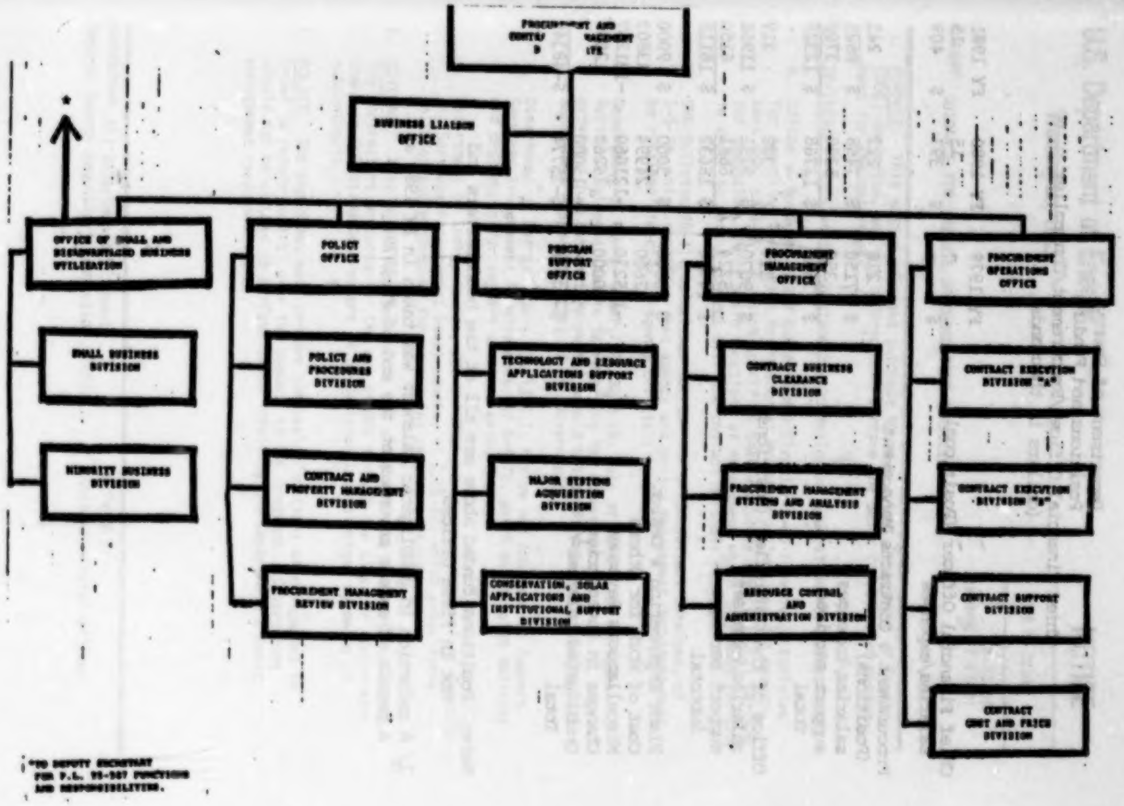
Department of Energy


Secretary (S) –
Charles W. Duncan, Jr.
Deputy Secretary (DS) –
John C. Sawhill
Under Secretary (US) –
John M. Deutch
SPECIAL ASSISTANT (SA)
Special Assistant –
Deanne C. Siemer
EXECUTIVE ASSISTANT (EA)
Executive Assistant –
Eberhardt K. Wruble
OFFICE OF LEGISLATIVE AFFAIRS (LA)
Assistant to the Secretary –
Richard Wright
OFFICE OF PUBLIC AFFAIRS (PA)
Assistant to the Secretary –
Lee Daly
FEDERAL ENERGY REGULATORY COMMISSION (RC)
Chairman –
Charles B. Curtis
Commission –
George Hall
Mathew Holden
Georgiana Sheldon
OFFICE OF INSPECTOR GENERAL (IG)
Inspector General –
J. Kenneth Mansfield
OFFICE OF THE GENERAL COUNSEL (GC)
General Counsel –
Lynn R. Coleman
ASSISTANT SECRETARY POLICY AND EVALUATION (PE)
Assistant Secretary –
William W. Lewis
ASSISTANT SECRETARY INTERNATIONAL AFFAIRS (IA)
Assistant Secretary –
Leslie J. Goldman
ECONOMIC REGULATORY ADMINISTRATION (RG)
Administrator –
Hazel R. Rollins
ENERGY INFORMATION ADMINISTRATION (EI)
Administrator –
Lincoln E. Moses
OFFICE OF HEARINGS AND APPEALS (HG)
Director –
Melvin Goldstein
BOARD OF CONTRACT APPEALS (BC)
Chairman –
John B. Farmakides
ASSISTANT SECRETARY CONSERVATION AND SOLAR ENERGY (CS)
Assistant Secretary –
Thomas E. Stelson
ASSISTANT SECRETARY RESOURCE APPLICATIONS (RA)
Assistant Secretary –
Ruth M. Davis
ASSISTANT SECRETARY FOSSIL ENERGY (FE)
Assistant Secretary –
George Fumich, Jr.
ASSISTANT SECRETARY ENVIRONMENT (EV)
Assistant Secretary –
Ruth C. Clusen
ASSISTANT SECRETARY NUCLEAR ENERGY (NE)
Assistant Secretary –
George W. Cunningham
ASSISTANT SECRETARY DEFENSE PROGRAMS (DP)
Assistant Secretary –
Duane C. Sewell
OFFICE OF ENERGY RESEARCH (ER)
Director –
Edward A. Frieman
CHIEF FINANCIAL OFFICER (CF)
Chief Financial Officer –
John A. Hewitt, Jr.
OFFICE OF MINORITY ECONOMIC IMPACT (MI)
Director –
Louis F. Moret
DIRECTORATE OF ADMINISTRATION (AD)
Director –
William S. Heffelfinger
OFFICE OF EQUAL OPPORTUNITY (EO)
Director –
Marlon A. Bowden
DIRECTORATE OF PROCUREMENT AND CONTRACTS MGT. (PR)
Director –
Michael J. Tashjian
OFFICE OF THE CONTROLLER (CR)
Controller –
Jack E. Hobbs

Office of the Controller


Controller
Jack E. Hobbs SES
Deputy –
P. Marshall Ryan SES
AUTHORIZED FTP: 308
ON-BOARD FTP: 285
SES: 18 Allocated
14 Filled
OFFICE OF SPECIAL PROJECTS
ADMINISTRATIVE STAFF
OFFICE OF BUDGET
Director –
Deputy Director –
Aaron Edmondson SES
• Budget Operations Division
Director –
Michael O'Neill SES
• Budget Analysis Division
• External Coordinating Staff
Director –
OFFICE OF INFORMATION MANAGEMENT SYSTEMS
Director –
Bert Greenglass SES
• Policy Planning and Systems Review Staff
• Department Management Information Systems Division
• Financial Management Information Systems Division
OFFICE OF PROGRAM AND PROJECT MANAGEMENT ASSESSMENT
Director –
C.N. Mitchell SES
• Independent Cost Estimating Staff
• Policy and Analysis Division
• Operations Division
OFFICE OF FINANCE AND ACCOUNTING
Director –
Robert L. Zarchoff SES
• Deputy Director –
W. Fletcher Lutz SES
• Accounting Policy and Procedures Division
• Financial Programs Division
• Washington Financial Services Division
• Planning and Control Staff
OFFICE OF FINANCIAL POLICY ANALYSIS AND GAO LIAISON
Director –
Clarence E. Mahan SES
• Financial Policy Division
• Financial Analysis Division

February 1, 1980


PROCUREMENT AND CONTRACTS MANAGEMENT DIRECTORATE
BUSINESS LIAISON OFFICE
OFFICE OF SMALL AND DISADVANTAGED BUSINESS UTILIZATION
SMALL BUSINESS DIVISION
MINORITY BUSINESS DIVISION
POLICY OFFICE
POLICY AND PROCEDURES DIVISION
CONTRACT AND PROPERTY MANAGEMENT DIVISION
PROCUREMENT MANAGEMENT REVIEW DIVISION
PROGRAM SUPPORT OFFICE
TECHNOLOGY AND RESOURCE APPLICATIONS SUPPORT DIVISION
MAJOR SYSTEMS ACQUISITION DIVISION
CONSERVATION, SOLAR APPLICATIONS AND INSTITUTIONAL SUPPORT DIVISION
PROCUREMENT MANAGEMENT OFFICE
CONTRACT BUSINESS CLEARANCE DIVISION
PROCUREMENT MANAGEMENT SYSTEMS AND ANALYSIS DIVISION
RESOURCE CONTROL AND ADMINISTRATION DIVISION
PROCUREMENT OPERATIONS OFFICE
CONTRACT EXECUTION DIVISION "A"
CONTRACT EXECUTION DIVISION "B"
CONTRACT SUPPORT DIVISION
CONTRACT COST AND PRICE DIVISION
*

*TO DEPUTY SECRETARY FOR P.L. 95-507 FUNCTIONS AND RESPONSIBILITIES.

Department of Energy
Positions and Funding
Chief Financial Officer/Procurement/Controller
(dollars in thousands)

	FY 1979	FY 1980	FY 1981
Chief Financial Officer (Positions)	-	15	15
salaries/expenses	$ -	$ 397	$ 409
Procurement & Contracts Management (Positions)	218	222	241
salaries/expenses	$ 7150	$ 7468	$ 8625
support services	350	5300	3700
Total	$ 7500	$ 12768	$ 12325
Office of the Controller (Positions)	314	308	319
salaries/expenses	$ 9070	$ 9791	$ 11968
support services	5724	6841	6150
Subtotal	$ 14794	$ 16632	$ 18118
Plant Engineering & Design	$ 3000	$ 3000	$ 9000
Cost of Work for Others	22600	24994	43803
Miscellaneous Revenues	-115230	-121660	-131267
Changes in Inventories	10000	16260	12000
Unobligated balances 1/	-	- 15000	-
Total	$-64836	$-75774	$-48346

Note: Positions funded above are all at the headquarters and not in field offices.

1/ A reduction in unobligated balances was taken in FY 1980 as a result of excess revenues at the end of FY 1979.

U.S. Department of Energy
Washington, D.C.

NOTICE

DOE N 3230.1

2-25-80
EXPIRES: 2-25-81

SUBJECT: GUIDANCE FOR THE USE OF CONSULTING SERVICES

---

1. PURPOSE. This notice provides guidance to ensure that Department of Energy (DOE) employees, and not contractors, perform the basic functions of management for the Department.

2. REFERENCE. This notice supplements the following Federal policy guidelines.

   a. Office of Management and Budget (OMB) Circular A-76 (revised), Policies for Acquiring Commercial or Industrial Products or Services for Government Use, of 3-29-79, which specifies that executive agencies will perform for themselves those basic functions of management which they must perform in order to retain control over the conduct of their programs.

   b. OMB Bulletin 78-11, Guidelines for the Use of Consultant Services, of 5-5-78, which specifies that agency and policy management decisions must be retained directly by agency officials.

   c. Department of Energy Order, DOE 3230.1A, Role of Contractor Personnel in Policy Development and in Representing the Government, of 8-28-78, which provides that contract personnel should not perform tasks involving basic management responsibilities of the Government.

   d. Department of Energy Order, DOE 1370.1, Review and Approval of Support Services Procurement Requirements, of 6-5-78, which establishes policies and procedures for support services procurements.

   e. Department of Energy Notice, DOE N 1370.1, Review and Approval of Consulting Services Procurement Requirements, of 2-25-80, which establishes policies and procedures for consulting service procurements.

3. COVERAGE. This notice applies to the use of all offsite contractors, including contractors procured for the use of DOE through the class of contractors known as Operating Contractors (e.g. National Laboratories) by means of subcontracts.

4. POLICY. DOE employees must perform the basic functions of management in order to retain control over the conduct of DOE programs. Contractors should not be allowed to perform tasks involving the Department's basic management responsibilities.

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Federal Energy Regulatory Commission (Info)

INITIATED BY:
Chief Financial Officer

5. BASIC FUNCTIONS. The basic functions of management consist of the tasks necessary to plan, organize, staff, conduct, and control the activities of the Department. DOE employees should perform the following functions:

   a. Program planning and development;

   b. Preparation of legislative initiatives and drafting of implementing regulations;

   c. Assignment and evaluation of organizational responsibilities;

   d. Establishment of DOE employment goals and priorities;

   e. Selection and direction of DOE employees;

   f. Evaluation of DOE employee performance;

   g. Development of program policy and guidance;

   h. Development of budget policy, guidance, and strategy;

   i. Acquisition strategy planning and preparation of procurement plans;

   j. Source selection activities,

   k. Financial assistance program planning;

   l. Establishment of performance goals, priorities, and schedules;

   m. Internal investigation, audit, and inspection; and

   n. Program review and evaluation.

6. EXCEPTIONS. While it is Departmental policy that DOE employees perform the tasks associated with the managerial functions listed in paragraph 5, contractors may be used when necessary to assist internal DOE resources. In such circumstances, the Department's managers must ensure that they retain program control and exercise their basic management responsibilities.

CW Duncan

Charles W. Duncan, Jr.
Secretary

U.S. Department of Energy
Washington, D.C.

NOTICE

DOE N 1370.1

2-25-80
EXPIRES: 2-25-81

SUBJECT: REVIEW AND APPROVAL OF CONSULTING SERVICE PROCUREMENT REQUIREMENTS

---

1. PURPOSE: This notice provides guidance to ensure that procurement requirements for consulting service contracts are properly documented by the requesting program organizations. This guidance modifies the policies and procedures of DOE 1370.1, referenced in paragraph 2c below.

2. REFERENCES. This notice supplements the following Federal policy guidelines:

   a. Office of Management and Budget (OMB) Circular A-76 (revised), Policies for Acquiring Commerical or Industrial Products or Services for Government Use of 3-29-79, which specifies that executive agencies will perform for themselves those basic functions of management which they must perform in order to retain control over the conduct of their programs.

   b. OMB Bulletin 78-11, Guidelines for the Use of Consultant Services, of 5-5-78, which specifies that agency and policy management decisions must be retained directly by agency officials.

   c. Department of Energy Order, DOE 1370.1, Review and Approval of Support Services Procurement Requirements, of 6-5-78, which establishes policies and procedures for support services procurements.

   d. Department of Energy Order, DOE 3230.1A, Role of Contractor Personnel in Policy Development and in Representing the Government, of 8-28-78, which provides that contract personnel should not perform tasks involving basic management responsibilities of the Government.

   e. Department of Energy Notice, DOE N 3230.1, Guidance for the Use of Consulting Services, of 2-25-80, which provides guidance to ensure that DOE employees perform the basic functions of management for the Department.

3. COVERAGE. This notice applies to the use by all DOE elements of offsite contractors, and to the procurement of consulting services for the use of DOE through the class of contractors known as Operating Contractors (e.g., National Laboratories) by means of subcontracts.

4. BACKGROUND. Support services contracts and the DOE policy and procedures for their review and approval are defined in DOE 1370.1. This notice applies to that subset of support services contracts relating to consulting services.

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Federal Energy Regulatory Commission (Info)

INITIATED BY:
Chief Financial Officer

5. DEFINITIONS.

a. The definitions provided by DOE 1370.1, paragraph 3b, Definitions, including the definition of support service contracts, are applicable for the purposes of this notice. Other terms used by this notice, such as program organizations, should be interpreted to be consistent with their use in DOE 1370.1.

b. Consulting services, as defined by OMB Bulletin 78-11, means those services of a purely advisory nature relating to the governmental functions of agency administration and management and agency program management. These services are normally provided by persons or organizations considered to have knowledge and special abilities that are not generally available within the agency. Examples of the type of services included in the definition of consulting services are:

(1) Advice on discriminatory practices in labor;
(2) Advice on organizational structure and management methods;
(3) Advice on and analysis of electric power projects;
(4) Evaluation of the effectiveness of agency publications;
(5) Advice on mail handling procedures;
(6) Advice on plans for conducting data collection activities;
(7) Analysis of the impact of a program;
(8) Advice on energy market development;
(9) Policy and program analysis, evaluation, and advice; and
(10) Services of grant peer review panelists.

c. The identification of a contract as a consulting service contract often can be difficult, especially because consulting service contracts are a subset of support service contracts. The identification will depend on the predominant characteristic of the contract. If the contract calls for the contractor predominantly to render advice, analyses, evaluations or recommendations to the Department, it is a consulting service contract. If the contract calls for the contractor to perform the types of services listed in OMB Circular A-76, it is a support services contract. It should be noted that OMB Circular A-76 does not apply to consulting services.

6. POLICY. Program organizations must thoroughly evaluate and justify their need for and use of consulting services. In addition to the provisions of DOE 1370.1, which apply to all support services contracts, program organizations shall comply with the policy set out in this notice for all consulting service contracts. While the following policy is applicable to all requests for consulting services regardless of dollar level, formal submission by a Secretarial Officer for review by the Director of Administration is required for those actions (the basic contract and options) exceeding $100,000.

a. The program organization must clearly establish that DOE will not be employing consulting services to perform work that DOE has been staffed to perform. Documentation shall include:

(1) A statement on the staffing and workload situation and an explanation why the proposed consulting service requires knowledge and special abilities not available in the program organization, in DOE, or in any other Federal agency.

(2) A statement describing the other options considered by the requesting office and a brief explanation why each was not chosen.

(3) A statement on why the proposed procurement action is in the best interests of the Government and an explanation of the specific need for the consulting service and its essentiality to the program organization's objectives.

b. The program organization must clearly establish that DOE will not be abdicating its governmental responsibility by using consulting services to perform basic management functions (see DOE N 3230.1 , Guidance for the Use of Consulting Services). Documentation must include:

(1) A statement on how the proposed contractual relationship will assist the program organization in the performance of its basic management responsibilities and how the program organization plans to exercise its independent judgment with respect to the input provided by the contractor.

(2) If a contractor must be used to assist the program organization in its performance of basic management functions, the program organization must submit a plan that details the methods to be used to ensure that the program organization retains program control and exercises its basic management responsibilities.

c. The program organization must clearly establish that it has a justifiable use for the input from the consulting service contractor. Documentation should include:

(1) An explanation of how and when the program organization plans to use the input provided by the contractor.

(2) A reference to the authority (e.g., legal, OMB guidance, functional statement, or other authorization) that is the basis for the program organization's request for consulting services.

d. The program organization must clearly establish that it has made a reasonable search to determine that it will not be employing a consulting service to provide input that is already available to DOE. The request must include a summary of the program organization's actions to locate the needed input from other DOE elements or Federal agencies that may have available, or may have contracted for, the same or similar input, or from repositories for that type of input.

e. If the program organization plans to use a contractor to draft legislative initiatives, implementing regulations, or similar products, the program organization must clearly establish that DOE will not be employing the consulting services to aid in influencing or enacting legislation. If applicable, the program organization must document the steps that will be taken to control the role of the contractor.

7. RESPONSIBILITIES AND AUTHORITIES.

a. Program Organizations.

(1) Prepares requests for consulting services in accordance with this notice.

(2) The Secretarial Officer reviews and approves all requests for consulting services irrespective of the estimated dollar value to assure that the provisions of this notice and sound contractual practicies are adhered to.

(3) For those consulting services requests having a value greater than $100,000, forwards the request to the Director of Administration for review.

b. Heads of Field Organizations.

(1) Reviews and approves requests that are not expected to exceed $100,000.

(2) Ensures that requests expected to exceed $100,000 are channeled through the cognizant Secretarial Officer for formal processing at DOE Headquarters.

c. Director of Administration (AD).

(1) Reviews requests for compliance with this notice and DOE N 3230.1, Guidance for the Use of Consulting Services, for contracts estimated to cost more than $100,000.

(2) If the request complies with these notices, AD will return the request to the program organization to continue the procurement action.

(3) If the AD review finds that the request does not comply with these notices, AD will inform the cognizant Secretarial Officer. Until the problems are resolved and AD determines that the request complies with these notices, the program organization cannot continue the procurement action.

Charles W. Duncan, Jr.
Secretary

U.S. Department of Energy
Washington, D.C.

NOTICE

DOE N 4210.1

2-25-80
EXPIRES: 2-25-81

SUBJECT: PREPARING TASK ASSIGNMENTS

1. PURPOSE: This notice emphasizes that Department of Energy (DOE) employees have a basic management responsibility for task assignments to DOE's contractors.

2. COVERAGE. This notice covers all level of effort, task assignment contracts with offsite contractors.

3. BACKGROUND. A level of effort, task assignment contract is employed by DOE when only the general nature and amount of work to be performed by the contractor is known at the time that the contract is awarded. When a specific work requirement has been identified by DOE, a task assignment is issued to the contractor. The basic responsibility for the identification of the specific work requirements rests with DOE. It is improper for DOE employees to rely on the contractor to prepare its own task assignment.

4. POLICY. DOE employees are responsible for identifying work requirements and preparing task assignments. A contractor must not be allowed to identify its own work requirement or write its own task assignment.

5. PROCEDURE.

   a. All Department Contracting Officers and technical respresentatives shall ensure that:

      (1) The need for the work to be performed under a task assignment is originated by DOE employees.

      (2) The task assignment is prepared and written by DOE employees.

      (3) The task assignment provides for the contractor to perform only work that is within the contract's scope of work and within the estimated cost and labor hour constraints of the contract.

      (4) The task assignment establishes a reasonable level of effort by the contractor to meet the specified work requirement.

      (5) It is made clear to the contractor that any discussion about a proposed task assignment cannot vary in any way the terms of the contract.

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INITIATED BY:
Chief Financial Officer

b. It is often advantageous for DOE to discuss a proposed task assignment with the contractor. The discussion may provide both parties with a clear understanding of the task assignment's subject matter, the method of accomplishment, and any restraints upon the contractor's performance. Any discussion must be consistent with the provisions of this notice.

6. EXCEPTIONS.

a. While it is Departmental policy that DOE employees prepare task assignments, contractors may be requested to submit task proposals. In such circumstances, DOE must make a specific written request to the contractor for preparation of each task proposal.

b. The policy of this notice is not intended to restrict the Department's use of a third party, such as a construction management contractor, to prepare task assignments for issuance by DOE to other contractors. It is also not intended to restrict the Department's acceptance of unsolicited proposals and the awarding of contracts to submitters of unsolicited proposals.

CW Duncan

Charles W. Duncan, Jr.
Secretary

U.S. Department of Energy
Washington, D.C.

NOTICE

DOE N 4220.3

2-25-80
EXPIRES: 2-25-81

SUBJECT: RATIFICATION OF UNAUTHORIZED CONTRACT AWARDS

1. PURPOSE. This notice establishes a new process that supplements existing procedures for the review of requests for ratification of unauthorized contract awards.

2. REFERENCE. DOE Procurement Regulation (DOE-PR), Subpart 9-1.405, Ratification of Unauthorized Contract Awards, of 6-30-79, which provides procedures for ratification of unauthorized contract awards.

3. COVERAGE. This notice applies to all procurement requests that involve ratification of an unauthorized contract award made by a DOE employee.

4. BACKGROUND. The only DOE personnel who are authorized to contract on behalf of the Government are DOE's Contracting Officers, duly designated and appointed in accordance with the Federal Procurement Regulations and the DOE Procurement Regulations. All work to be performed by a contractor must be authorized by a Contracting Officer. All other DOE personnel lack contracting authority, and any commitments made by them are unauthorized.

5. UNAUTHORIZED COMMITMENTS. Unauthorized commitments cause problems because they frustrate the Department's attempts to maximize the use of competitive procurement techniques. Other problems often arise because the definition of work to be performed is usually deficient. In addition, the Department is put at risk in that:

   a. The work may not be necessary or in conformance with existing plans.

   b. There are no controls imposed upon performance by the contractor.

   c. DOE may be required to defend against a suit by the contractor for compensation as a result of its work.

   d. The contractor may have an organizational conflict of interest and not be legally eligible for the contract.

   e. The contractor may be on the debarred bidders list or in violation of equal employment opportunity or environmental requirements and not be legally eligible for the contract.

   f. There may be a violation of the Anti-deficiency Act.

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INITIATED BY:
Chief Financial Officer

6. PROCEDURES.

a. For any request, the DOE employee who made the unauthorized contractual commitment must prepare the request for ratification in accordance with DOE-PR Subpart 9-1.405(c)(1).

b. The request and the information required by DOE-PR Subpart 9-1.405(c)(1) must be forwarded to the cognizant program Assistant Secretary, Operations Office Manager, or equivalent official, based on the source of funds for the proposed contract, for that person's concurrence.

c. If the Assistant Secretary or equivalent official concurs with the request for ratification, the request and concurrence must be forwarded to the Chief Financial Officer. The Chief Financial Officer will review the request and the information submitted in accordance with DOE-PR Subpart 9-1.405(c)(1) for action, as follows:

(1) If the request does not appear to be reasonable as submitted, it will be returned to the concurring Assistant Secretary or equivalent official.

(2) If the request does appear to be reasonable, it will be forwarded to the Head of the Procuring Activity as indicated in the request.

d. The Head of the Procuring Activity retains final legal authority to approve the ratification of an unauthorized commitment in accordance with DOE-PR Subpart 9-1.405(b).

7. PERSONAL LIABILITY. Any DOE employee who makes an unauthorized commitment to a contractor undertakes the substantial risk of personal liability for costs incurred by the contractor as a result of that employee's unauthorized commitment. If the Department does not ratify the employee's unauthorized commitment, the contractor has performed work at its own risk and may act to recover damages from the DOE employee.

8. RECOMMENDATION. In circumstances that require work to be started immediately, the appropriate Contracting Officer should be contacted at once. Contracting techniques may be available to enable the immediate commencement of work.

Charles W. Duncan, Jr.
Secretary

Mr. **Dingell**. Mr. Secretary, on these contracts which you issued over the years for the kinds of services that are being discussed so you can get a quick response to the work-order mechanism, the master contract, what is the duration for those master contracts?

Mr. **Hewitt**. Are we talking about quick-reaction work orders or master agreements?

Mr. **Dingell**. Master agreements. What is the duration of those contracts?

Mr. **Hewitt**. We do have some of these master agreements that have extended for a long time.

Mike Tashjian can speak to those.

Mr. **Dingell**. Is there a fixed duration for those contracts?

Mr. **Tashjian**. I am not sure we understand the terms. If you are talking in many cases where we are dealing with a contractor on a repetitive basis, we enter into a master agreement which includes all the terms and conditions we have agreed to. That is not a contract. Then as we enter into contracts we will incorporate by reference that master agreement.

Mr. **Dingell**. Is an agreement a contract, or something else? My law school taught me that an agreement and contract were the same.

Mr. **Yohalem**. Mr. Chairman, the distinction is between an agreement which is not itself legally binding and a contract. I think what Mr. Tashjian has indicated——

Mr. **Dingell**. It is not a binding contract?

Mr. **Yohalem**. No.

Mr. **Dingell**. Does this agreement compel any payment of moneys?

Mr. **Yohalem**. No. It is basically a set of negotiated agreements which may be incorporated by reference in a specific contractual instrument at a future date, but it, itself, is not binding.

Mr. **Dingell**. Does it require or permit any payment of moneys?

Mr. **Yohalem**. No.

Mr. **Dingell**. Does it require or permit delivery of any goods or services?

Mr. **Yohalem**. Not itself; no.

Mr. **Dingell**. It is incorporated, however, according to its language in subsequent agreements?

Mr. **Yohalem**. Yes, sir.

Mr. **Dingell**. Does it deal with the cost of subsequent agreements or the provision of services, or the payment for services?

Mr. **Tashjian**. It might in the sense if we had a standard agreement for the processing of payments, or there might be some standard agreement which would be standard operating procedure between a contractor and ourselves, but in every case there would be a contract which would be negotiated, which would be a contract that would describe the goods and services we are ordering, so this is an administrative convenience, and it is done broadly in the Government.

It is my experience in DOE that we negotiate master agreements for convenience. Once you hammered out, say, an agreement in the patent clauses, instead of every contract hammering that out, you would incorporate all those provisions agreed to in the master agreement, and that may stay in effect for many years. Then a new public law might come out which might change the terms, and you would negotiate a new master agreement or update it.

Mr. DINGELL. Is that established, the cost for which services will be provided?

Mr. TASHJIAN. No, it has no cost information in it.

Mr. DINGELL. Does it require the Government to take any particular level of services or delivery of goods?

Mr. TASHJIAN. It does not. It is like a memorandum of agreement that is a convenience to reduce the administrative burden of negotiating on every single contract in terms of the conditions.

Mr. DINGELL. Does it provide any terms with regard to the number of times that the contractor services will be used within any particular period?

Mr. TASHJIAN. It does not.

Mr. DINGELL. Is it renegotiated at any particular period?

Mr. TASHJIAN. Well, there is generally an opener which says either side may, on 60 days' notice, open an issue of a particular clause or paragraphs previously agreed to. So, yes, it is openable by either party on proper notice.

Mr. DINGELL. How often is it reopened?

Mr. TASHJIAN. I think when parties perceive they must make a change.

Mr. DINGELL. Parties. I am sure the parties do. What about the Government?

Mr. TASHJIAN. I mean the contracting party or the Government. That is what I mean by either party for agreements to this master agreement. Generally, we would open that master agreement up if there was passage of a new statute.

Mr. DINGELL. Do you ever have more than one master agreement on one subject pending with more than one contractor at a time?

Mr. TASHJIAN. I am not aware of more than one master agreement with any one contractor.

Mr. DINGELL. How about on the same point, having master agreements with more than one contractor? Do you have that?

Mr. TASHJIAN. Yes, we would have master agreements with several contractors.

Mr. DINGELL. On the same precise point, or just in the same general area?

Mr. TASHJIAN. It may differ from contractor to contractor. They tend to look pretty much alike. We are talking about contractors with whom we shall be doing considerable repeat business over the years.

Mr. DINGELL. How are you going to have a fellow under a master agreement who will be doing considerable repeat business over the years?

Mr. TASHJIAN. We have been using them mainly with the Government on nuclear facilities.

Mr. DINGELL. Are you using these in connection with any other activity at DOE?

Mr. TASHJIAN. I am not aware of us using the master agreements with other than contractors who are exclusively in the nuclear area.

Mr. DINGELL. That is the only place where master agreements are used, is in the nuclear area?

Mr. TASHJIAN. To the best of my knowledge, yes.

Mr. DINGELL. What do they do in these areas?

Mr. TASHJIAN. What do the contractors do, the nature of the service?

Mr. DINGELL. What obligations are imposed on the contractor by the master agreement?

Mr. TASHJIAN. No obligation, if there is no contract. I am not sure what you are getting at.

Mr. DINGELL. Unless there is a subsequent contract. What you are telling me is these agreements then embody essentially agreed-upon terms which are just slipped into the contracts because the contract is made; right?

Mr. TASHJIAN. Yes, incorporated by reference. Each contract would be a stand-alone contract with its own funding, its own goods and services.

Mr. DINGELL. You say these only relate to nuclear?

Mr. HEWITT. Mr. Chairman, maybe I could give an example of one of these. Some of the task orders were written under them. There are several. We surveyed two operations offices, one in San Francisco, the other in Chicago. In Chicago, with Westinghouse Electric Corp., we have a general description for research associated with the breeder reactor base technology program. We issued several task orders under that which are specific contracts which have durations, cost associated, and so forth.

Mr. DINGELL. Were there any attempts to procure competitive bidding with regard to the task orders which are issued on this matter?

Mr. HEWITT. It would depend on the specific case.

Mr. DINGELL. Can you name me any specific case in which under a master agreement you have issued task orders under any kind of competitive conditions or competitive rules?

Mr. HEWITT. I can't specify or give an example of one, but I am not certain that is the nature of these vehicles in the first instance. The point is that we have——

Mr. DINGELL. Are you using them to expand or constrict competition? If every one of the task orders that is issued pursuant to these agreements is issued without any competition, it strikes me they probably are a mechanism for closed competition.

I just asked if you could tell me of any instance where the task orders had subsequently been issued on a competitive basis, and you advised me you recall none.

Mr. HEWITT. Within the broad area of research and development that we are buying, we conduct a competitive procurement that sets up these master agreements in the first instance. At that point, we have carved out a scope of R. & D. work which we are then prepared to issue specific task orders against, and there really is not much competition in this industry.

Mr. DINGELL. How often do you review these to bring about potential determination of the behavior and the compliance of the contractor with the contract, and how often do these contracts terminate so you can take a look at these things?

Mr. HEWITT. Every one of these task orders is a separate contract.

Mr. **Dingell.** I understand that; that is already on the record. How often do you review the master agreement?

Mr. **Hewitt.** At any time the Government determines that the performance that the contractor has provided in the execution of a particular task order suggests that he is no longer qualified to do this work, or the costs are out of line, or any other relevant factor.

Mr. **Dingell.** Is that the only trigger that brings about the review of these matters?

Mr. **Tashjian.** Could I make a general comment to try to place in context what we have here?

Recognize the majority of the contractors we are talking about are contractors in the nuclear business, who have their genesis from the Atomic Energy Commission, which was classified—a very narrow business base.

Mr. **Dingell.** Is that any longer so?

Mr. **Tashjian.** Yes, sir, it is. For example, the core for the nuclear reactors for Admiral Rickover's submarines has only two suppliers.

Mr. **Dingell.** This is all good, and I don't want to foreclose you from saying what you have in mind, but it is an answer to the wrong question. The question that I asked is, What is the mechanism for terminating these master agreements, or reviewing them? Do you have a periodical basis? Are there orders or memorandums or instructions to other officers—indeed, to DOE—with regard to the times of terminations or mechanisms for review so you can ascertain whether or not a continuance of these agreements is in the public interest, and that it is reviewed on some automatic or timely basis to assure that they are, in fact, in conformity with the public interest in terms of carrying out their responsibilities on costs, in terms of carrying out their responsibilities in providing responsive answers to the questions submitted to them as part of the task agreement, or to assure there is, in fact, competition; that you might get a new entry who might provide better service at lesser cost.

Is there any mechanism of this type on any kind of automatic basis or any other kind of basis?

Mr. **Hewitt.** I think it appears we do not have specific policies in this area. As Mr. Tashjian commented, they are old vehicles. I will move out immediately to consider what is appropriate in this respect, and we will have written procedures in the near future.

[Testimony resumes on p. 959.]

[The following information was received for the record:]

U.S. Department of Energy
Washington, D.C.

ORDER

DOE 4200.1

SUBJECT: REVIEW AND APPROVAL OF NONCOMPETITIVE PROCUREMENTS 5-8-80

1. PURPOSE. The Federal Procurement Regulations and the statutes relating to the award of Federal contracts place significant emphasis on the requirements for "competition" in the expenditure of Federal funds. This further emphasizes the necessity to limit the use of noncompetitive procurement actions and provides procedural guidelines for the examination, preparation, coordination and approval of justification for noncompetitive procurements within the Department of Energy.

2. SCOPE. The provisions of this Order apply to all Department of Energy elements that are involved in the preparation, coordination, or approval of justifications for noncompetitive procurement.

3. COVERAGE. This Order covers all noncompetitive procurements, including instances where "new" procurements (i.e., outside the contractual scope of work) are initiated through modifications to existing contracts and where the requirement for a written justification for noncompetitive procurements exists. See paragraph 10b below for special exceptions.

4. BACKGROUND. Although the guidelines contained in this Order will assist in documenting an adequately supported decision to select a source for supplies or services on a noncompetitive basis, the objective of using the competitive acquisition process is paramount and noncompetitive decisions should not be a substitute for competitive alternatives. The Federal and DOE Procurement Regulations and good business practices mandate that competitive methods be the first alternative considered and that noncompetitive procurement be permitted only on an exception basis. Competition in the award of Government contracts should be viewed as standard practice. Competitive procurement can and should be maximized through effective advance program planning, clear definition of requirements, and timely release of procurement requests.

5. REFERENCES.

   a. Federal Procurement Regulations, subsection 1-3.101(d), which provides broad policy guidance as to the procuring activity's responsibilities relative to noncompetitive procurement.

   b. DOE Procurement Regulation, subsection 9-3.805-51, which provides policy guidance concerning applicability, content, reviews, and approval of justifications for noncompetitive procurements.

DISTRIBUTION:
All Departmental Elements
Federal Energy R[illegible]tory Commission (Info)

INITIATED BY:
Procurement and Contracts
Management Directorate

6. DEFINITIONS.

   a. Noncompetitive Procurement. A decision to negotiate a contract only with one source (or group of sources) in circumstances where only that source or group of sources has the exclusive capability to perform needed work within the time required and at reasonable prices for reasons such as eminent experience, specialized facilities, or technical competence.

   b. Justification for Noncompetitive Procurement. A written document that sets forth the reasons and documents the overriding circumstances which preclude competition.

   c. Head of the Procuring Activity. The senior official within a DOE organizational element who has overall responsibility for the supervision and direction of a procurement activity, who has been delegated authority by the Headquarters Senior Procurement Official to award contracts and appoint contracting officers, and who has been formally designated as a head of the procuring activity.

7. OBJECTIVE. To provide DOE-wide procedural guidance to ensure:

   a. Uniformity in the preparation and processing of justification for noncompetitive procurements;

   b. Thoroughness in considering circumstances that may lead to the conclusion that only one source is able, within the time required, and at a reasonable price, to provide needed supplies or services; and

   c. Vigorous independent reviews of justification for noncompetitive procurements in excess of certain dollar levels.

8. PROCEDURE.

   a. Recommendations to procure on a noncompetitive basis shall be prepared for all applicable noncompetitive procurements in the format set forth in Attachment 1. Each justification shall set forth enough facts and circumstances to establish clearly and convincingly that competition would not have been feasible or practicable and what actions will be taken to avoid the need for subsequent noncompetitive procurements.

   b. An evaluation panel shall be convened to review justification for noncompetitive procurements prior to final concurrence and approval for procurement actions when the estimated value is expected to exceed $5 million.

9. RESPONSIBILITIES.

   a. For Headquarters Noncompetitive Procurements. If the initiating

Headquarters Program Office concludes that only one source is qualified to perform the needed work, the initiating official shall obtain the clearance of the cognizant Assistant Secretary, Administrator, Director of Energy Research, Director of Procurement and Contracts Management, Director of Administration, or Controller to proceed on any proposed noncompetitive action in excess of $10,000. With this clearance, the initiator shall recommend that a contract be negotiated with that sole source and prepare the written justification for noncompetitive procurements in the prescribed format. The justification for noncompetitive procurements is required to be approved by predesignated DOE officials prior to its release to the procurement organization for concluding a contract.

(1) Concurrences on justifications prior to approval shall be obtained from the Senior Program Official (or his or her designee) and the Senior Procurement Official, Headquarters (or his or her designee) on actions that are in excess of $5 million; from the Office of General Counsel on those actions in excess of $1 million, or such lower amount as the General Counsel may determine; and from the designee of the Senior Procurement Official, Headquarters, in excess of $500 but less than $5 million.

(2) Justification for Noncompetitive Procurements Evaluation Panel. A panel shall be convened and chaired by the Senior Procurement Official or designee in the Office of Program Support, Procurement and Contracts Management, for all justification for noncompetitive procurements when the estimated value is expected to exceed $5 million. The evaluation panel membership shall also include a representative of the initiating program office and the Office of General Counsel. Whenever possible, the justification for noncompetitive procurements evaluation panel members should be those individuals that possess the required concurrence signature authority. The evaluation panel shall convene before the initiating program office requests concurrences. An advisory finding of the panel shall be made available to concurring and approving officials.

(3) Approval Officials. The designated officials for indicated dollar threshold levels are covered in DOE PR 9-3.805-51.

b. For Field Office Initiated Noncompetitive Procurements. Heads of procuring activities may approve justifications for noncompetitive procurement initiated by a field office up to $5 million or up to the dollar limit of delegated contracting authority,whichever is less. Approval and concurrence requirements below this dollar level shall be established by the head of the procuring activity consistent with this Order and applicable procurement regulations. Justification for noncompetitive procurements initiated by field offices in excess of $5 million shall be submitted by the head of the procuring activity to the cognizant Headquarters' program offices for processing under the procedures of paragraph 9a. of this Order.

10. EXCEPTIONS.

a. Exceptions to the approval levels are set forth in DOE PR 9-3.805-51 (d)(1)(i)(E).

b. The provisions of this Order do not apply to those special types of procurement or acquisitions as described in paragraph (b) of DOE PR 9-3.805-51.

CWDuncan

Charles W. Duncan, Jr.
Secretary

(FORMAT)
JUSTIFICATION FOR NONCOMPETITIVE PROCUREMENT

CONTRACTOR:

VALUE: $

SUPPLIES/SERVICES:

I recommend that negotiations be conducted only with (source) for the supplies and services described herein in accordance with DOE PR 9-3.805-51.

1. Description of Supplies or Services to be Procured:

   a. A brief, general, nontechnical description and statement of the general application and particular significance or specialized character of the procurement.

   b. A description of all associated supplies or services, e.g., technical data, reports, engineering services, and so forth to be procured.

2. Procurement History, Estimated Future Requirements, and Long Range Procurement Objectives:

   a. Brief statement of the technical and contractual evolution of the supplies or services being procured from initiation to present status.

   b. Brief statement as to whether the work is a continuation of previous effort performed by the proposed contractor.

   c. Reference should be made to any advance planning information previously prepared or furnished, together with information with respect to any changes proposed in the present justification which represents a departure or modification of prior procurement plans, including a statement of the effect of the changes, if any, on scheduled milestones.

   d. Statement as to what actions have been or will be taken to develop competition and eliminate a noncompetitive situation in future procurements of the proposed supplies or services, particularly as to the availability of complete and accurate data, reasonableness of delivery requirements, and possible breakout of components for competitive procurements.

3. Estimated cost.

   a. The estimated cost of the procurement and a brief description of assumptions made and data used by the initiating program office to develop the estimate.

   b. The estimated cost listed by fiscal years.

   c. Whether the proposed contractor or the Government has a substantial investment of some kind that would have to be duplicated at Government expense by another source.

4. Schedule requirements.

   a. The basis for establishing schedule requirements.

   b. An explanation of the urgency, if any, of the requirement. Describe why the schedules are critical and why only the proposed contractor can meet them.

   c. Describe what significant cost savings or other benefits could result if schedules could be relaxed and whether competition could thus be obtained.

5. Exclusive capability.

   a. Does the proposed contractor have personnel considered unquestionably predominant experts in the particular field?

   b. What prior experience of a highly specialized nature does the source exclusively have that is vital to the proposed effort?

   c. What facilities and test equipment does the source exclusively have that are complex or specialized and vital to the efforts?

   d. Is competition precluded because of the existence of patent rights, copyrights, secret processes, trade secret, technical data, or other proprietary data?

   e. What other capability and capacity does the proposed contractor have that is necessary for the specific effort and makes it clearly the only source that can perform the work on the required time schedule without incurring clearly unreasonable costs?

6. Other.

   a. If lack of drawings or specifications are a constraining factor, why is the proposed contractor clearly best able to perform under these circumstances? Why are the drawings and specifications lacking? What is the lead time required to get drawings and specifications suitable for competitions?

b. Are parts or components being procured as replacement parts in support of equipment specially designed by a manufacturer, where data available is not adequate to assure that the parts or components obtained from another source would perform the same function?

Project Manager
Name, Title
Office, Division and Branch

Date

Concur:

Program Manager or Designee

Office of General Counsel

Date

Procurement and Contracts Management Directorate

Date

Approved for noncompetitive procurement in accordance with DOE PR 9-3.805-51:

Approving Official

Date

Mr. **Dingell**. You have told me these all relate to nuclear matters.

I have a copy of a letter here sent to Mr. Finnegan, enclosing a sampling of master agreements. This is from your Chicago office, and the first one that comes to me is molten salt interaction in coal processing study. That is not an atomic or nuclear matter. This is San Francisco—DEAT-03-76ER70030. The issue was August 1, 1974, to September 30, 1980; $998,000 out of that one.

Here is HTGR gas turbine study, fabrication for. That is nuclear.

Let's come on down here a little further. The master agreement—take Battelle Memorial Institute, issued April 16, 1943. Has that ever been reviewed? This is at page 7 in the submission to the committee. Has that ever been reviewed?

Mr. **Hewitt**. Again, it is not a contract.

Mr. **Dingell**. It is a master agreement. It permits you to take services from this individual.

Mr. **Hewitt**. Permits you to take services if you negotiate a contract.

Mr. **Dingell**. Yes.

Has this master agreement ever been reviewed?

Mr. **Hewitt**. I am sure it has.

Mr. **Dingell**. It has. Can you tell me when? This indicates from April 16, 1943. That is back during World War II. Has it ever been changed? Have you ever analyzed the competitive or anticompetitive effects of this? The terms of the master agreement is indefinite.

Mr. **Hewitt**. I can't talk to the specifics of this, Mr. Chairman. I have previously stated that I think it appropriate to establish specific criteria for the review of these master agreements. We will document them; we will provide them to the committee for their review.

As Mr. Tashjian mentioned, this is one of those areas that was carried over when the Department was formed a couple of years ago, and it has not been a matter of my attention.

Mr. **Dingell**. Let us talk about a couple more here. You told me these task orders issued pursuant to master agreements relate to nuclear matters.

I have one entitled "Survey of Compensation Paid to Scientists and Engineers Engaged in R. & D. It could or could not be nuclear. That was December 1, 1966 and goes on to March 31, 1980. Is that nuclear?

Mr. **Hewitt**. I can't say.

Mr. **Dingell**. Why does it go on from 1966 to 1980?

Mr. **Tashjian**. There is nothing wrong per se, Mr. Chairman, with an agreement——

Mr. **Dingell**. We are not discussing agreements, but task orders. That is December 1, 1966, and its termination date is March 31, 1980. "Survey of Compensation Paid to Scientists and Engineers Engaged in R. & D." Are these task orders for long-term work or short-term work? What is the policy of the Department on that—referring to task orders?

Mr. **Tashjian**. I can't tell, in many cases.

Mr. **Dingell**. I can't either.

Mr. **Tashjian**. I would say from the title it is hard to perceive that would be a justifiable long term one. On occasion there are unique technologies where there might be one individual.

Mr. **Dingell**. That doesn't tell me whether task orders, according to your policy, are long-term or short-term mechanisms. Which are they?

Mr. **Tashjian**. When you have to annually fund them, they are always looked at annually.

Mr. **Dingell**. I am aware of the budgetary process, but the contract goes on and on, and in this instance it has gone on for, as of 1980, it will be 14 years. It is hard to call that a task order. That is long-term contracting, in my opinion.

Mr. **Tashjian**. I think a task order is a wrong name. These are contracts. We would have to look at the genesis in the Atomic Energy Commission and see what has induced it to be in effect for so long. It might be investment in certain technologies, or tooling. It is hard to tell.

Mr. **Dingell**. "Survey of Compensation Paid to Scientists and Engineers Engaged in R. & D." It was submitted by you folks. We didn't put this together.

The next one I have in what you told me are all nuclear is one that is dated June 15, 1975, to March 31, 1980—Task Order DEA—0276CH92077. "Systems Study of Bioconversion Concept Involving Energy"—is that nuclear? You told me these things were nuclear.

Mr. **Tashjian**. Mr. Chairman, this Department was not in existence over 2 years ago, so if they date from 1966, they must have been under the Atomic Energy Commission. That is what accounts for our comments.

Mr. **Dingell**. This is somewhat at variance with what you told us.

Mr. **Tashjian**. I am sorry if I misled you. The point I was making was these long-term ones originated in the Atomic Energy Commission and were carried forward in DOE, which has been in existence 2 years. Any one that exceeds 2 years or 3 years had to predate——

Mr. **Dingell**. These are 5-year task orders.

The next one is "Gasification Using Chemically Incorporated Catalysts," June 25, 1975, to September 30, 1980.

The next page—these are fresh. DOE was in existence at this time, and I have to know. Let's take "Research on Titonium Alloy Superconductors," March 1, 1978, to March 31, 1980.

Mr. **Tashjian**. It is not uncommon to write a 3-year contract.

Mr. **Dingell**. It is not nuclear.

Mr. **Tashjian**. Again, I can't tell. It might be for a nuclear component. It is hard to tell from the subject we have here, sir. I am sure there are some that are not. But predominantly they are and date from the predecessor agency.

Mr. **Dingell**. These are all task orders that are issued pursuant to a master agreement of 1943. Has that master agreement ever been reviewed?

Mr. **Tashjian**. Yes, sir, it has. They are periodically updated.

Mr. **Dingell**. Can you tell me each and every one of these conform fully to the original master agreement?

Mr. TASHJIAN. I am sure through the years they have been changed to represent what turns out to be the current agreement.

Mr. DINGELL. Can you give me the dates of the reviews of the master agreements and what the reviews were?

Mr. TASHJIAN. No, I can't. I doubt they have been recorded. I think it is an iterative process. Through the years a series of contracting officers have negotiated these, starting in the 1940's and updated as the need arises.

Mr. DINGELL. Aren't you telling me you were unable to point at any specific policies or reviews of these master agreements?

Mr. TASHJIAN. Yes, that is true.

Mr. DINGELL. And the task orders are issued pursuant thereto?

Mr. TASHJIAN. I don't think we have any policy on master agreements which says you must review them because the normal course of dealing with a contractor provides the impetus to periodically update them on either side.

Mr. DINGELL. It sounds more like a sweetheart arrangement to me.

Mr. TASHJIAN. They don't obligate the Government at all.

Mr. DINGELL. They don't obligate the Government, but you get this nice, friendly relationship between them, and there is no policy for review with regard to competition, with regard to new competitors.

Mr. TASHJIAN. The task order is the area in which you would compete, not the master agreement.

Mr. DINGELL. What are the policies with regard to the issuance of the task orders?

Mr. TASHJIAN. It is nothing but a term for a contract.

Mr. DINGELL. What are the policies with regard to the assurances these task orders produce competition so you can get the best service, best delivery of contract, best contract under the best advantage currently?

Mr. TASHJIAN. That is the norm we attempt to pursue.

Mr. DINGELL. I understand that is the norm. What is embodied in there? Do you have any policy in writing you can submit?

Mr. TASHJIAN. Yes, we have a policy in our procurement regulations.

Mr. DINGELL. Do they apply to this?

Mr. TASHJIAN. Yes, sir.

Mr. DINGELL. They do?

Mr. TASHJIAN. Yes.

Mr. DINGELL. In every instance?

Mr. TASHJIAN. Yes, because they are issuing a contract.

Mr. DINGELL. I want you to cite particularly the parts of the procurement regulation which deal with the question——

Mr. TASHJIAN. We will be glad to provide the coverage, because our coverage requires in the event you go to a noncompetitive procurement, you have to justify it, and it describes the methodology.

[The following information was received for the record:]

Request. Provide the policies with regard to the competitive issuance of "task orders" under "master agreements".

The terms "master agreement" and "task order" are carryovers from the Atomic Energy Commission. The Department of Energy is subject to the Federal Procurement Regulations (FPR). in the FPR, these instruments are referred to as "Basic

Agreements" and "Contracts". The FPR states that "Basic Agreements shall not be used in any manner to restrict Competition". (FPR 1-3.410-1(c) (2). The FPR policy on Basic Agreements is attached.

In cases of non-competitive contracts which utilize Basic Agreements as an administrative convenience, the non-competitive aspect must be thoroughly justified in accordance with DOE-Procurement Regulation 9-3.805-51 (attached).

FEDERAL PROCUREMENT REGULATIONS

§ 1-3.410 Other types of agreements

§ 1-3.410-1 Basic agreement

(a) *Description.* A basic agreement is a written instrument of understanding executed between a procuring agency and a contractor which sets forth the negotiated contract clauses which shall be applicable to future procurements entered into between the parties during the term of the basic agreement. The use of the basic agreement contemplates the converage of a particular procurement by the execution of a formal contractual document which will provide for the scope of the work, price, delivery, and additional matters peculiar to the requirement of the specific procurement involved, and shall incorporate by reference or append the contract clauses agreed upon in the basic agreement, as required or applicable.

(b) *Application.* (1) Basic agreements are appropriate for use when (i) past experience and future plans indicate that a substantial number of separate contracts may be entered into with a contractor during the term of the basic agreement, and (ii) substantial recurring negotiating problems exist with a particular contractor.

(2) A basic agreeemt shall be amended only by an amendment of the basic agreement itself and shall not be modified or superseded by individual contracts or purchase orders entered into under and subject to the terms of such basic agreement. As a minimum, basic agreements will be reviewed annually on the anniversary of their effective data and revised at that time to comform with the current requirements of this chapter. Amendments shall not have retroactive effect.

(3) Basic agreements shall provide for discontinuance of their future application upon 30 days written notice by either party. Discontinuance of a basic agreement will not affect any individual contract referencing the basic agreement (or the clauses appended thereto) entered into prior to the effective date of discontinuance.

(c) *Limitations.* (1) Basic agreements shall neither cite appropriations to be charged nor be used alone for the purpose of obligating funds.

(2) Basic agreements shall not in any manner provide for or imply any agreement on the part of the Government to place future orders or contracts with the contractor involved. Basic agreements shall not be used in any manner to restrict competition.

(3) Basic agreements generally shall be utilized only in connection with negotiated contracts.

§ 1-3.410-2 Basic agreements with educational institutions and nonprofit organizations

(a) This section sets forth information and procedures regarding basic agreements for the procurement of research and development from educational institutions and nonprofit organizations.

(b) An appropriate agreement may be negotiated with each educational institution and nonprofit organization (except Federally Funded Research and Development Centers (FFRDC), including the Federal Contract Research Centers (FCRC) as they are designated in the Department of Defense (DOD)), in accordance with the conditions set forth in § 1-3.410-1. Agencies are encouraged to obtain and utilize the basic agreements entered into by both other civilian agencies and DOD to the maximum practicable extent.

(c) The responsibility for negotiating basic agreements with educational institutions and nonprofit organizations for the DOD has been assigned to the Office of Naval Research, 800 North Quincy Street, Arlington, Virginia 22217. At the beginning of each fiscal year the Office of Naval Research will issue a listing of DOD current basic agreements. Copies of the agreements are maintained by the Office of Naval Research and are available to procurement activities of civilian agencies upon request.

(d) The responsibility for negotiating basic agreements for the civilian agencies rests with each individual agency. Each agency shall report its agreements to the FPR Staff, General Services Administration, FV, Washington, D.C. 20406, 15 days after September 30, each year.

(e) A list of civilian agency basic agreements will be compiled by the General Services Administration. The list will be combined with the DOD list, and will be published at the beginning of each fiscal year in FPR Bulletins.

[40 FR 27655, July 1, 1975, as amended of 43 FR 7318, Feb. 22, 1978]

§9-3.805-51 Noncompetitive procurement.

(a)(1) While negotiated procurement shall be on a competitive basis to the maximum practical extent (FPR 1-3.101(d)) and reasonable competition shall be obtained in making small purchases in excess of $500 (FPR 1-3.603-1(a)(1)), there are circumstances where one source (or groups of sources) has exclusive capability to perform the work within the time required and at reasonable prices, e.g., by reason of experience, specialized facilities, or technical competence. In such a circumstance, the initiating program office may conclude that only one source (or groups of sources) is qualified to perform the work and, therefore, recommend that a contract be negotiated only with that source or group. (In the case of a "group sole source" situation, a justification is required for limiting competition to that group and for the allocation of work among members of the group.) The recommendation, in writing, shall be contained in a separate document entitled "Justification for Noncompetitive Procurement," and shall examine the reasons for the procurement being noncompetitive in accordance with paragraph (c) below.

(2) For a noncompetitive procurement, an approved justification shall be attached to the procurement request when the request is sent to a Contracting Officer for action.

(3) A justification for noncompetitive procurement is also required where "new" procurements (i.e., outside the contractual scope of work) are initiated through modifications to existing contracts.

(4) If a noncompetitive procurement has been justified and approved, in accordance with this section, as a part of an annual procurement plan and such plan has been reviewed and approved, it will not be necessary to resubmit the justification for approval at the time each individual procurement action is processed. Such justifications shall be made a part of the permanent contract file (see DOE-PR §9-1.313).

(b) The provisions of this regulation do not apply to:

(1) Procurements of electric power or energy, gas (natural or manufactured), water, or other utility;

(2) Procurements of educational services from nonprofit institutions;

(3) Procurements resulting from program opportunity notices, or program research and development announcements (which are forms of competitive solicitations);

(4) Acquisitions from or through other Government agencies;

(5) Contracts which are subject to separate justification for recompetition or extension,

(6) Contracts resulting from unsolicited proposals (because they are subject to the approval procedures for justifications for unsolicited proposals);

(7) Special Research Contracts with educational institutions and extensions thereof (because they are subject to the separate process for SRC's); and

(8) Subscriptions to periodicals (under $10,000)

(c) Justification for noncompetitive procurement.

(1) The document entitled "Justification for Noncompetitive Procurement" shall examine the reasons for the procurement being noncompetitive and shall contain, in the first sentence of the document, an appropriate recommendation (e.g., "I recommend that negotiations be conducted only with (name of entity) for the supplies and services described herein.") For small purchases the justification for non-competetive procurements should be in accordance with small purchase procedures.

(2) Each justification shall set forth enough facts and circumstances to clearly and convincingly establish that competition would not have been feasible or practicable. The following format includes considerations to be made in preparing the justification.

(i) Description of supplies or services to be procured.

A. A brief, general, nontechnical description and statement of the general application and particular significance or specialized character of the procurement.

B. A description of all associated supplies or services, e.g., technical data, reports, engineering services, and so forth, to be procured.

(ii) Procurement history, estimated future requirements, and long-range procurement objectives.

A. A brief statement of the technical and contractual evolution of the supplies or services being procured from initiation to present status.

B. A brief statement as to whether the work is a continuation of previous effort performed by the proposed contractor.

C. A reference should be made to any advance planning information previously prepared or furnished, together with information with respect to any changes proposed in the present justification which represent a departure or modification of prior procurement plans, including a statement of the effect of the changes, if any, on scheduled milestones.

D. A brief statement as to what actions have been taken to develop competition and eliminate a noncompetitive situation in future procurements of the proposed supplies or services.

(iii) Estimated cost.

A. The estimated cost of the procurement and a brief description of the assumptions made and data used by the initiating program office to develop the estimate.

B. The estimated cost listed by fiscal year.

C. Whether the proposed contractor or the Government has a substantial investment of some kind that would have to be duplicated at Government expense by another source.

(iv) Schedule requirements.

A. The basis for establishing schedule requirements.

B. An explanation of the urgency, if any, of the requirement. Describe why the schedules are critical and why only the proposed contractor can meet them.

C. Describe what significant cost savings or other benefits could result if schedules could be relaxed and whether competition could thus be obtained.

(v) Exclusive capability.

A. Does the proposed contractor have personnel considered unquestionably predominant experts in the particular field?

B. What prior experience of a highly specialized nature does the source exclusively have that is vital to the proposed effort?

C. What facilities and test equipment does the source exclusively have that are complex or specialized and vital to the effort?

D. Is competition precluded because of the existence of patent rights, copyrights, secret processes, trade secrets, technical data, or other proprietary data?

E. What other capability and capacity does the proposed contractor have that is necessary for the specific effort and makes it clearly the only source that can perform the work on the required time schedule without incurring clearly unreasonable costs?

(vi) Other.

A. If lack of drawings or specifications is a constraining factor, why is the proposed contractor clearly best able to perform under these circumstances? Why are the drawings and specifications lacking? What is the lead time required to get drawings and specifications suitable for competition?

B. Are parts or components being procured as replacement parts in support of equipment specially designed by a manufacturer, where data available is not adequate to assure that the parts or components obtained from another source would perform the same function?

(d) Review and approval. The justification shall, as a minimum requirement, be reviewed and approved as follows: (In the case of cost-sharing contracts, the contractor's shared amount will be included in the dollar amounts specified.)

(1) Noncompetitive procurements initiated by Headquarters.

(i) Approval levels. The following are designated as approval officials for justifications for noncompetitive procurement for the indicated dollar levels:

A. The Secretary, Deputy Secretary, or Under Secretary when the estimated value is expected to exceed $50,000,000 or where it is anticipated that the source selected will receive other contracts and/or contract modifications for later phases of the same project which, cumulatively, would total more than $50,000,000.

B. The cognizant Assistant Secretary, Administrators, Director of the Office of Energy Research, Controller, Director of Procurement and Contracts Management, or Director of Administration when the estimated value of the contract is over $10,000,000 and up to and including $50,000,000. This authority may be delegated in writing on a case-by-case basis only when approved by the Under Secretary.

C. The cognizant Office Director when the estimated value of the contract is over $5,000,000 and up to and including $10,000,000. This may be delegated in writing on a case-by-case basis to a field office manager or a project manager. Each such delegation shall be concurred in by the Director, Procurement and Contracts Management or his designee.

D. The cognizant Office Director or designee when the estimated value of the contract is under $5,000,000, in accordance with existing procurement policies and procedures.

E. Exceptions. The Secretary, Deputy Secretary, or Under Secretary may retain approval authority on any specifically designated justification for noncompetitive procurement regardless of dollar value. The cognizant Assistant Secretaries, Administrators, Director of Energy Research, Director of Procurement and Contracts Management, Director of Administration, or Controller may retain approval authority on specifically delegated justifications for noncompetitive procurement under $10,000,000.

(ii) The retention of authority described above shall be signed by the appropriate retaining official and placed in the official contract file.

(iii) Concurrence on justifications prior to approval shall be obtained from the Senior Program Official or his designee and the Senior Procurement Official, Headquarters, or his designee in excess of $5 million; Counsel, in excess of $1 million, or such lower amount as Counsel may determine; and the designee of the Senior Procurement Official, Headquarters, in excess of $500 but less than $5 million.

(2) Noncompetitive procurements initiated by field offices.

(i) Approval levels.

(A) Heads of Procuring Activities may approve justifications for noncompetitive procurements initiated by a field office up to the dollar limit set forth in §9-3.805-50.

(B) Approval and concurrence requirements below the HPA level shall be as the HPA deems appropriate; Counsel shall determine the appropriate level for Counsel's required approval and concurrence.

(ii) Justifications for noncompetitive procurement which exceed the dollar limit of the HPA's contracting authority shall be submitted with HPA recommendation to the cognizant Headquarters program office for approval as if it were initiated at headquarters.

Mr. DINGELL. We are going to give you this list, and you tell me how many were issued competitively and how many noncompetitively.

Mr. TASHJIAN. I would guess most of them were issued noncompetitively.

Mr. DINGELL. Is that a true statement with regard to all of these task orders that were issued?

Mr. TASHJIAN. I don't have personal knowledge, because we are talking about field offices. I can't carry it in my head, but I would judge a number of these which have gone on for many years are exclusive capability, and we have each year on a research basis put more money in to continue this technological examination, whatever it may be.

Mr. DINGELL. How do you know these are the only beltway bandits that do this type of work?

Mr. TASHJIAN. I don't think we are talking about beltway bandits.

Mr. DINGELL. They are beltway bandits; they just aren't located on the beltway as far as I am concerned.

Mr. TASHJIAN. I am just saying this is a body of contractors who came into being with the Atomic Energy Commission in the early 1940's and have been carried forward in these high technology——

Mr. DINGELL. Have you ever reviewed this policy? Has there ever been a review of this policy? You have contracts dating to the early 1940's that go on.

Mr. HEWITT. I think we don't have the policies that you are looking for.

Mr. DINGELL. Should you have the policies?

Mr. HEWITT. Mr. Chairman, I will develop the policies that you and I are both looking for in this area.

Mr. DINGELL. You have the good turn of having the shelter of being freshly into this position, and I am fair enough——

Mr. HEWITT. I am not trying to fall behind that shelter. I am trying to say the Department is deficient in this regard, and we will correct it.

Mr. DINGELL. However, I feel it is not appropriate for me to go after you, and somebody should be gone after for what they are not doing. I find myself distressed on this matter.

Well, I am going to recognize Mr. Moorhead, who has been most gracious to wait.

Mr. MOORHEAD. Mr. Peach, maybe you could answer a question that came to my mind as a result of the testimony that has been given. I understand from your testimony that about 55 percent of $9 billion has been granted on these noncompetitive contracts.

Mr. PEACH. The information we had showed that 55 percent of all of DOE's obligations susceptible to competition in fiscal year 1978 were not awarded competitively.

Mr. MOORHEAD. We also heard the testimony that most of these were in the nuclear field. I would like to know how much of that noncompetitive approximately $5 billion that was awarded on that kind of contract was in the nuclear field.

Mr. PEACH. I don't have that specific figure, Mr. Moorhead, but I would draw a distinction in that I think they were talking about certain types of contracts running back for a period of years, mostly being in the nuclear field. When you get to the 1978 period, that is the period after you have the creation of the Department of Energy and it is involved in a lot of different activities, other than just nuclear activities, and I am sure that that contracting relates not just to nuclear but relates to the broad range of all the different energy areas in which the Government is involved.

Mr. **Moorhead**. Maybe you can give me the answer to that, Mr. Hewitt. Of the total noncompetitive contracts, what percentage are in the nuclear area?

Mr. **Hewitt**. We don't have the data quite that way, but I think to your question the data that Mr. Peach has provided is about what we experienced in 1978, when you take—if you look at that which remains for general business competition, taking out the Goverment-owned/contract-operated, taking out interagency transfers and grants, and so forth, our data would say 56.3 percent in 1978 was competitive, growing in 1979 to 76.4 percent.

But that is taking out all of the contracts which we were talking about, that $5 billion or so, and a large portion of that, as Mr. Tashjian mentioned, is noncompetitive.

[The following information was received for the record:]

Percentage of Noncompetitive Contracts in Nuclear Area

There is a need for some clarification as to what is represented by the 55 percent and the 9 billion dollars.

Total fiscal year 1978 obligations were 10.8 billion. Of that amount, approximately 9 billion was not susceptible to competition. The 9 billion is broken out on the attached Chart I. The 1.8 billion that remained, was susceptible to competition and of the 1.8 billion, 55 percent was not competed.

We are unable to provide data on how much of the 55 percent in fiscal year 1978 was for nuclear work. However, you will note we have provided on Chart I, the data for fiscal year 1979 also. In fiscal year 1979, 49.8 percent of those obligations susceptible to competition were not competed. Of the 49.8 percent that was not competed, 7.24 percent of the dollars were for nuclear work. In dollars that is as follows:

Fiscal year 1979:	*Millions*
Obligations susceptible to competition but not competed	992
Obligations to nuclear work that were susceptible to competition but not competed (7.24 percent)	71.8

Summary Statistics

	FY 1978		FY 1979	
Total FY Obligations		$10,822,733,774		$9,485,030,510
Less:				
GOCO	$5,199,540,806		$5,125,146,160	
Interagency Transfer	2,876,042,590		1,152,418,139	
Rents and Utilities	300,523,668		303,812,650	
State & Local Gov'ts	119,607,184		374,367,079	
Unsolicited Proposals (other than universities)	209,826,475		182,364,351	
Universities (other than GOCO)	245,702,409		339,282,368	
Foreign Gov'ts	4,188,500	8,956,059,632	12,696,335	7,490,087,082
SUBTOTAL		$ 1,866,674,142		$1,994,943,428
Less:				
Follow-on Obligations				
• Competitive	501,108,198		516,601,772	
• Non-competitive	754,423,107	$ 1,255,531,305	843,024,804	$1,359,626,576
Available to General Business-Competition		$ 611,142,837 (100%)		$ 635,316,852 (100%)
Competitive New Awards		$ 344,266,294 (56.3%) ←		$ 485,579,799 (76.4%) ←
Non-Competitive Awards		$ 266,876,543 (43.7%)		$ 149,737,053 (23.6%)

Competitive	845,374,000	45.3%	1,002,182,000	50.2%
Non-Competitive	1,021,300,000	54.7% ←	992,762,000	49.8%

Mr. Moorhead. You know the impression I get about all of these things is that there is just so much money in the Department of Energy that you have to find some way to spend it. Rather than have worthwhile projects, you have to get rid of the money during the year, so a lot of it, when you look at the studies, they look like make-work—nice but not necessary—and a lot of other things that really don't go to solving the nation's energy problems.

Of course, all of us want to spend the money that has to be spent to solve this horrendous energy problem that we have, but we don't want to spend it on a lot of studies that really don't go to the main crux of the problem.

There is a headline, "DOE Spends $1.2 million on Seaweed." These expenditures just are not meeting the Nation's need. A lot of the things that you do are meeting the need, and I am not writing off the total program of the Department, but we are concerned, when we give you over $12 billion, that too much of it is going for frills, giving it to some company to see what they come up with, and I think the problem is too serious for that. I hope you do, too.

Mr. Hewitt. I certainly agree that every dollar we spend needs to be directed to a specific objective. Some of that is in the area of general research, where the results are tougher to quantify in the short run.

Mr. Moorhead. Another area you alluded to in the testimony given that I am concerned about was so many of these private contractors are dealing in areas that really are policy areas. We have private contractors making the policy for the Department of Energy that is going to affect all of the people of America. On those policy issues there is almost a conflict of interest that is involved there, or that could very easily be involved; and I am concerned that we are doing this kind of thing.

One thing that comes to mind as far as our rationing programs and allocation programs, I understand private contractors are involved there, and that goes directly to the heart of national policy.

Mr. Hewitt. It depends on the specific way that they are involved. I would share your view that there are too many examples in our system today where consultants have performed a policy analysis function that would more appropriately be done within the Department's own internal resources. At least to the extent that those analyses are provided to the Department who, in turn, would look at alternative options and make selections from that, it seems to me that is an appropriate use of support in certain cases.

But it goes back to one of the DOE notices that we just promulgated that laid out specifically those functions which contractors would not be responsible for, and one of those was definitely in the area of developing departmental policies or energy policies. That is a departmental responsibility.

Mr. Moorhead. Senator Hatch and others have filed a suit in the District Court for the District of Columbia asking for injunctive relief against the DOE policy exhibited in a memo by the Deputy Secretary that asked high-ranking DOE officials to boycott scheduling of DOE events in States that have not ratified the ERA.

Does DOE discriminate against contractors located in the targeted States?

Mr. HEWITT. No, absolutely not. Pure and simple, that was a goof. The memo was retracted shortly after it was written. It was a misstatement, and the matter has been cleaned up.

Mr. MOORHEAD. Do you have any internal procedures that have been established to challenge contracts as frivolous or wasteful? Is there any way that you in the Department act on this?

Mr. HEWITT. Very definitely. In the process of the contract administration and management of those activities, from a point of view of technical performance, a judgment is made as to whether or not the Department got the quality work that it contracted for. The contracting officer is responsible for determining whether or not the costs being charged to that contract are appropriate.

As we mentioned earlier, we use the Defense Contract Audit Agency to assist us in that function, but there are several ways where we insure the Department gets the value for which it spends its money.

Mr. MOORHEAD. It is going to take some time for us to absorb all of the information we have gotten from reports that have come in today, but I can assure you, from listening to the chairman, he is much concerned, and I know I am.

I am not talking about your whole $12 billion. We are not throwing a lot of that away that otherwise would be saved. But it is obvious if we have as much as $5 billion being spent on noncompetitive contracts it might be advantageous to encourage competitors to come in to a field they are not in and eventually we would get a better deal, if there are only one or two contractors there. That is enough money to encourage anybody to get involved if they have an opportunity to get the contract.

Mr. HEWITT. We look for opportunities to recompete these contracts. Generally, they are in place for 5 years, so the $5 billion, you know, is misleading in the sense that there are several contracts that that represents, of course, and we do look to see whether any of those can be recompeted at the end of that 5-year period.

Mr. TASHJIAN. Some of these facilities are for the design, test and manufacture of nuclear weapons. We have in some places what is tantamount to industrial operations. It is classified.

Mr. MOORHEAD. I understand the problem where you are involved with certain types of nuclear problems that are classified. I understand that. And that was the reason for one of my earlier questions, and that is how much of this is in the nuclear field and how much is not.

Mr. TASHJIAN. The bulk of it is in that area. That is the point I want to make. You have essentially an operation that has been run by a company over a number of years.

Mr. MOORHEAD. Just because you have the name nuclear doesn't mean it should be an exclusive area, but only if it happens to deal with classified matters, and in areas where you couldn't have competition.

Mr. TASHJIAN. It isn't just classified. We have several thousand employees in a highly skilled area in some places and to sort of bring in a whole new contractor who hasn't been operating this facility would be a difficult thing to do and might not be cost-effective. But we do have the requirement. We write a contract for 5 years because of learning curves and other applications, but each time we seek to renew the contract, we require the preparation of a report as to whether to recompete or extend to the incumbent contractor.

We have a compete-extend board, and it goes through a very senior level, so that we make that review each time that it comes up for renewal, and it goes up to the Under Secretary level, the determination whether or not we will continue.

Mr. MOORHEAD. It may very well be the best thing to roll these over, but if they are all getting——

Mr. TASHJIAN. Not all of them. We have one in the office in Richland, about a year and half ago, that we did compete. So there are instances where we have competed some of those. But they are examined on a case-by-case basis, certainly not automatic.

Mr. DINGELL. Would the gentleman yield? Ought you not have your master agreement subject to periodic rollover so you can take a look at the behavior of the contractor over the years?

Mr. TASHJIAN. We are not talking about master agreements.

Mr. DINGELL. Ought you not have? Is there any reason why that is not subject to periodic rollover so it could be looked at to ascertain the contractor behavior?

Mr. HEWITT. No. We will do it.

Mr. DINGELL. Thank you, Mr. Hewitt. I guess a fresh broom does sweep clean.

Mr. HEWITT. I think, Mr. Chairman, that it is important to distinguish between three types of vehicles that we unintentionally are mentioning and merging in this discussion. One are master agreements for which task orders are written. That is a special category of problem, which has not been properly attended to and which we will address, in terms of specific policies regarding the review of the terms and conditions of those master agreements and the whole basic approach for doing business in this area.

A second vehicle is our support service contract for which we write task assignments. It is my view that, in the main, the GAO's comments with respect to task orders are really with regard to task assignments against support service contracts.

And third, our quick reaction work order vehicles, which I am sure we will get to in a moment.

Mr. DINGELL. If the gentleman will yield——

Mr. MOORHEAD. I just had one more question.

Mr. Fitzgerald, you have heard the comments made about the large amounts in nuclear contracts not biddable. Do you feel that the nuclear shield is sufficient argument against going to more competitive contracts in all of these nuclear areas?

Mr. FITZGERALD. No, sir, I do not necessarily. In particular, the problem—and I would concede that it can be a problem—that General Tashjian brought up is not necessarily an insurmountable one. He mentioned the problem of having several thousand highly skilled workers who had been in place for a long time. I have had some experience with this, myself, and it is entirely possible to compete GOCO, compete the management of GOCO's without necessarily disturbing the bulk of the work force in place.

There are certain arrangements that have to be made, particularly regarding transfer of pension rights and things of that sort, but I made a survey for a client of mine in the Navy a number of years ago, a plant of 7,000 people with whom we were having a very difficult negotiation, and so we decided to compete the tendency of the GOCO, and we found we would only have to move 17 people of the 7,000 in order to recompete the plant.

Now there are certain documentations that should be captured as a matter of contract. Plant operating procedures and things of that sort should be very clearly the property of the Government or they should have access to them. I see no reason you could not compete GOCO's.

As a matter of fact, I proposed that in the instance of a large airplane program I was once involved in. It didn't sell, but Secretary Packard, who was Deputy Secretary of Defense at the time, later conceded he would have had no trouble bringing in new management.

I think the practice of competing GOCO's should be expanded. It has been done before, not very often. The Army has done it on occasion, but not nearly enough.

Mr. MOORHEAD. I want to thank you. I think this discussion this morning is very valuable, and I hope it is valuable to the members of the Department of Energy, because I know many of us would certainly like to see some changes made that would give our people a better deal.

Mr. DINGELL. The Chair thanks the gentleman.

The gentleman from Illinois, Mr. Corcoran.

Mr. CORCORAN. Thank you, Mr. Chairman.

I also want to make the comment that I appreciate the testimony of the panel. Most of my questions, however, are going to be directed to the new Chief Financial Officer in the Department of Energy.

I am very concerned about this whole matter of contracting out. I am one of over 40 cosponsors of H.R. 4717, introduced last July by Congressman Herbert E. Harris, and there are a couple of aspects of it that I want to explore with you.

The first aspect is the mentality in many agencies whereby they want to use the money in their contracting programs at the end of the year or face the prospects of losing it in the appropriation process for the coming fiscal year. I am referring to the "use it or lose it" syndrome.

The second aspect is the problem that we have very acutely now in the Government whereby there is a limit on personnel, and I think that in some respects there is pretty good evidence that the agencies use contracting-out procedures as a way to circumvent the personnel ceilings.

First of all, Mr. Hewitt, can you tell me the percentage of your agency appropriation that you obligated in the last 2 months of fiscal year 1978, fiscal year 1979, and your expectation as to 1980?

Mr. HEWITT. In the last 2 months of 1978—and these figures will be approximate—we obligated about 9 percent for the 2 months, and in fiscal year 1979 we obligated around 15 percent, and I do not have the plan for fiscal year 1980 in front of me.

Mr. CORCORAN. The plan is the thing that particularly concerns me, because, as we all recognize, you are new in the position, and your major objective, as I understand it, is to employ better management policies within the agency.

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I just wonder if there are any policies right now, if there is any way whereby your associates in the accounting divisions within the Department of Energy are on a month-by-month basis, reviewing what is happening in the contracting-out programs.

Mr. **Hewitt**. Very definitely. Let me just say in that regard that we do have it—I just don't have the data—we do have an obligation plan on a monthly basis. We are tracking our performance on a monthly basis.

It goes to a point that I was trying to make in the opening remarks with respect to what we can do to increase competition.

Too much of the work, even with this data, in my view is pushed into the last 6 months of the year which does tend to load up the procurement requests and the workload, if you will, on the procurement activity.

We held in November—maybe it was December; in that timeframe; early in the fiscal year—a major review with all of the program outlays Assistant Secretaries. Mr. Tashjian and his people went thorugh a detailed presentation of the kind of job we did in the last fiscal year; the kind of job that our procurement planning looked like for this fiscal year. The Under Secretary and I imposed a requirement that at the end of the quarter that we would be reviewing the results of that data in terms of actual performance. Mr. Tashjian went around separately then to each of the Assistant Secretaries and discussed their own situation in the context of last year's performance.

I think we have taken aggressive action. Do I think we have solved the problem? No, sir. But I do think the steps are in the right direction.

Mr. **Corcoran**. It sounds very good, but the trend is not good. You have gone from a 9-percent increase to a 15-percent increase in the 2 years for which we have data. And that is a 67-percent increase.

Mr. **Hewitt**. On a normal basis you would be talking about roughly 8½ percent each month, which would be 17 percent over the course of the 2 months that you asked about. The 1978 data had a large amount of money that was deobligated in November, which offsets—if you look at the last month, we obligated about 11 percent in the last month in each of the 2 years.

Mr. **Corcoran**. Well, one other question on that aspect of the problem: The legislation which Congressman Harris is sponsoring and, as I indicated, I am cosponsoring, H.R. 4717, has as one of its components a provision that says that no more than 20 percent can be obligated in the last 2 months of a fiscal year. I believe that we would all prefer executive management rather than legislative controls, but Congress is attempting to bring some pressure to bear on the problem.

Based on your experience, do you think the 20-percent figure is too high?

Mr. **Hewitt**. When I have been asked that question before, I have said that that figure does not give this department a problem, but I do not think it is too high. I think there is enough latitude within that figure to operate.

Mr. **Corcoran**. The other aspect of this matter, as I indicated earlier that I want to discuss with you, is the problem that faces you, especially a newly reorganized agency like yours, but I think all the agencies today, in terms of complying with the personnel ceilings.

Do you have any idea right now, or do you think it would be possible for you to at some point provide to the committee any information as to the numbers of people that are employed as a result of this contracting-out process.

Mr. HEWITT. The numbers of people in industry that we have——

Mr. CORCORAN. Would it be possible—in fact, most of the contracts I have seen indicate how many people are going to be involved in the particular service or operation that is going to be performed for the Government, and would it be possible at some point to give us the total man-years?

Mr. HEWITT. To be sure, we are addressing the question; there have been some contracting-out studies that have been completed where we have made decisions, conscious decisions, to take work that was previously being done in the Government and found it more efficient, cost-effective to do it outside of the Government. In those cases there are specific contractors involved, and we can easily provide for the record what those are.

I might just say that you should be aware that these Government-owned contracted operations which do not fit, I believe, in the line of questioning you are talking about, do represent substantial numbers of manpower spaces out in the field operations.

Mr. CORCORAN. I think we need that kind of information in order to make further judgments about the whole matter of the personnel ceiling as well as the contracting-out problem. That is the reason I asked for the information.

Mr. HEWITT. To be specific with regard to the manpower in these Government-owned contracted operations, basically they are national laboratories. We have something in excess of 100,000 persons that are employed in these several laboratories.

Mr. CORCORAN. Would you mind submitting that for the record, please?

Mr. HEWITT. We can provide the data.

Mr. CORCORAN. That would be for all DOE contracts?

Mr. HEWITT. I am trying to draw the distinction between Government-owned contracted operations which are these manufacturing facilities and national laboratories as contrasted to contracts that we would let for demonstration facilities, or pilot facilities, or research and development in other areas.

There it would virtually be impossible—what you are really talking about in that case is how many people are working on the energy problem in the country, in terms of the combination of that which we directly fund.

Mr. CORCORAN. I respect that distinction, and I would like you to provide us the information that you think would be appropriate to help us analyze the problem.

Mr. HEWITT. Yes, sir.

[The following information was received for the record:]

The latest data available is as of September 30, 1979. At that time there were 109,414 full-time employees reported.

The revised OMB Circular A-76 was promulgated on March 29, 1979. Official DOE Implementation was by Notice, August 9, 1979, and letters directing A-76 studies in a broad number of areas were sent in late September and early October 1979.

As of this time, March 17, 1980, one comparative cost analysis has been received, evaluated and approved for contracting out. That is, for the Word Processing function at the San Francisco Operations Office. A contract has not yet been awarded.

Mr. **Corcoran**. Second, let me ask you this on this part of the problem. Do you feel, based on your discussions to this point with your program officers and others within the Department, that contracting out is used as a means of circumventing the personnel ceiling requirement?

And before I give you an opportunity to respond to that, let me suggest I don't think that is necessarily a bad thing if your answer is yes. As a matter of fact, in the testimony before the Post Office and Civil Service Committee, on which I serve, I can cite you a lot of evidence of this. For instance, in a response to a letter of inquiry by our committee to the General Services Administration, the regional administrator responded to that question: "The explanation of why the GSA contracted for this function when it was obviously cheaper to perform the function in-house is, as previously discussed, due to restricted personnel ceilings."

And I think that the testimony, for instance, of the Department of Defense pointed out many of the hidden costs and other problems associated with the means to circumvent the personnel ceiling.

So I am not trying to lead you into a trap when I raise that question. I just need to know, because the matter does come up for review at the end of this year. That personnel ceiling expires at the end of the current fiscal year, and it is something that we are going to be reviewing, and I would like to know whether or not at this point you have seen any evidence that contracting out is used as a means of circumventing the personnel ceilings.

Mr. **Hewitt**. On the question of manpower ceilings, I do not believe that we have a situation that is one which circumvents these manpower ceilings, but I must say that we really are in a situation where the amount of work that is coming to the Department is dynamic and changing. The total manpower levels in the Department really haven't changed since it was formed and, in fact, in many areas have come down some, and yet we have taken on several new programs.

The consequence of that is we have, in fact, decided in certain of these cases to manage the activities internally, but to use contractual resources to carry out the work. Some of this work—and we have not done, I must say, the economic analysis that says whether we could perform the function cheaper by bringing on 100 people or 200 people to carry that activity out. I am sure there are some examples where if that analysis had been done, it could be shown it could be cheaper. I think, in the main, what we are trying to do is work in the constraints that we have to get the best job that we can.

Mr. **Corcoran**. And you are suggesting those constraints ought to be reviewed?

Mr. **Hewitt**. I think those constraints should be reviewed as part of the budget process every year.

Mr. **Corcoran**. Finally, I would like to discuss with you the program and personnel requirements as a result of the gasoline rationing program:

We had testimony from DOE's Economic Regulatory Administration indicating there may be as many as 5,000 people at the Federal level that will be required to implement the rationing program, should it go into effect. The question I have is, will these 5,000 people be employed as full-time employees, or will the department contract out for those services?

Mr. **Hewitt**. If you had asked me that question 2 weeks ago, I couldn't have told you a thing about that program, but in the last 2 weeks I have become reasonably apprised.

I think you need to separate out, if you will, two phases, the preimplementation phase of the rationing program from an operational phase, should the requirement come about for us to implement the standby rationing program.

The large numbers that you refer to are the numbers that would occur in that second phase, the operational phase.

One of the important tasks that need to occur in the preimplementation phase is to work out with other Federal agencies clear memorandums of agreement as to how we could mobilize in an emergency situation a Federal work force that would have to be detailed in for presumably a short period of time at the various distribution points to handle such a program as this.

On top of those Federal employees, there would be upward of 3,000 people within the State and local government program to handle field processing. The large numbers of people that we have talked about in earlier testimony are, in fact, in the implementation or operational phase.

If you come back to the preimplementation phase, which is the issue soon to be in front of us, we will be requesting, and we have a supplemental up here pending in front of the Congress now for, as I recall, 45 additional authorized spaces to go with the $43 million. On top of that, we are considering what the real requirement of implementing such a plan is, and we are close to having firmed that up.

I might say we will be clearly managing that activity within a program office. We will have a lot of systems development work to do. We would not do that work internally. We would contract for that work. Depending on the time frames that the Congress suggests that we implement such a standby rationing program, we will very conceivably be forced into sole-source procurements.

Mr. **Corcoran**. How many detailees do you have now at the Department of Energy from other Federal agencies?

Mr. **Hewitt**. The only ones I can specifically talk to are three that I had detailed down from the Social Security Administration to help in the current analysis that I have underway with respect to the costing side of that problem.

Mr. **Corcoran**. Thank you very much.

Mr. **Dingell**. The time of the gentleman has expired.

The Chair recognizes counsel, Mr. Finnegan, for the purpose of asking questions.

Mr. **Finnegan**. Thank you, Mr. Chairman.

Mr. Peach, in the opinion that was attached to your statement dated February 15, 1980, concerning quick reaction work orders, [See p. 874] there is a statement on page 9 that, "In light of this explanation, plus the other justification advanced by DOE, we find the theory of QRWO master contracting to be reasonable and not, in and of itself, unduly restrictive of competition."

The reference to the other justification is on page 8 in which the opinion refers to what the department has argued as some of the reasons why they need quick reaction work orders. They state, and I quote:

> In the past, DOE states it has met urgent requirements by awarding sole-source or level-of-effort task order contracts, a practice which may have increased costs, produced inferior products, and limited opportunities for competition, particularly for small and minority business firms. In addition, DOE acknowledges, it has sometimes found it necessary to authorize pre-contract costs, enter into letter contracts, or ratify informal commitments by unauthorized personnel.

Now, the first question I have is the reference, those justifications, particularly let me say to the informal commitments, such as the chairman has raised before, they are illegal, or at least appear to be illegal.

Is that really a justification for a quick reaction work order that you would rely then on something that is highly questionable under the procurement regulations?

Mr. PEACH. We certainly would not rely on something that we consider highly questionable under the procurement regulations. What I would like to draw here, Mr. Finnegan, is a distinction between how you would look conceptually at the idea of quick reaction work order contracts, and how, in fact, they may be carried out within the department.

What we are trying to say is that there is a legal justification for using that type of contract to meet urgent situations. It can provide an opportunity for more competition than under a sole-source type of contract. You can have competition for the master contract originally and, in concept, you should also have competition for individual work orders by the contractors that are qualified under the master contract.

So in concept it can operate that way. Of course, then the next question is how it is being carried out, and we hads considerable amount of criticism of the way it was being carried out, both in terms of lack of adequate documentation for urgency, and also in terms of sole-sourcing individual work orders after people had qualified under the master contract.

I would like to make the distinction between the concept and the way it is carried out.

Mr. FINNEGAN. Going first to the ratification of these informal commitments, the chairman referred to a memorandum of the Department, and it concerns the ratification of these commitments, and I believe this memorandum was issued by Mr. Joseph P. Cappelo, Director of the Office of Procurement Operations, and he is somewhat critical of them. He said:

> It should be clearly apparent that the following undesirable results can attend the need for a ratification of an authorized commitment: potential program delays if ratification is denied; potential overexpenditure of program funds; potential litigation; potential personal liability.

He goes on and states:

The situation that has developed at DOE is that the incidence of ratification in precontract cost cases has assumed an unacceptable and unbusinesslike level. In the past 9 months this office has received more than 75 such cases on procurement with accumulative award in excess of $125 million. There is unmistakably evidence in the files encompassing most of them of inordinate delays and inappropriate actions in the originating offices which are the cause of the request for ratification and precontract cost coverage.

Mr. Hewitt's response to the questions of the chairman has provided to us a February 25, 1980, notice of ratification of unauthorized contract awards which, incidentally, expires 1 year later in 1981, and nowhere in the notice—and I asked both Mr. Peach and Mr. Hewitt this—is there any indication that this practice is illegal, nor is there any real indication that a secretarial officer would have to approve an authorized commitment at a later date.

Mr. DINGELL. Well, I think it is also important to observe the cumulative amounts of money that become involved by reason of this practice, without any high level official of the department ever actually having viewed, reviewed, or concurred in the undertakings.

Would you please comment on that, Mr. Peach?

Mr. HEWITT. If I might, the DOE notice does expire a year hence, but only for the reasons that I previously mentioned, and that is that we wanted to issue such notice immediately rather than go through the coordination process that is otherwise required to get a DOE order out. That notice will not expire without being replaced by a more permanent vehicle.

But I believe you will read in that notice one of the Department's principal officers, myself, or one of four senior officers of the Department, will approve every ratification that comes up in the future.

Mr. DINGELL. That is as regards the future, but in the meantime this matter has grown like Topsy, up to this point.

Mr. HEWITT. Sir, I think there are 21 instances where we have had ratifications. I find that an unacceptable figure. I share your concern.

I can only deal with the present and the future. It is not a future question. It is today. That policy is in effect today, strongly supported by the Secretary and the rest of us.

Mr. DINGELL. I applaud that, but I must observe with some regret there is no instance on the book that I can ascertain—and if you can, enlighten me—where any of these extensions of renewals have ever been denied, or the ratification has ever been denied, by a secretarial officer.

Again, you are not to be castigated, but I must assume with the volume of money flowing through that at some point there would have been denial by some secretarial officer of one of these. I simply cannot believe all of these things would have proceeded so smoothly and happily as to bring about some denial if the Department were properly scrutinizing these matters.

Mr. HEWITT. There are no cases where any of these have been denied. That is correct.

Mr. DINGELL. And that raises the question, what is the adequacy of supervision that takes place during these events?

Mr. HEWITT. Mr. Chairman, I think that is exactly to the point. We are talking about a basic deficiency in the management of this type of activity that begins and ends in effect in the program areas where they do not understand that they are not authorized to commit the Government in the ways that they have. But once they have turned a contractor on in this sense, the alternatives are to pay the contractor or deny the contractor payment for services that he thought he was being authorized to undertake.

Mr. DINGELL. But you have never denied any of these being paid?

Mr. HEWITT. That is correct.

Mr. DINGELL. I am not aware of any other mechanism you have to discipline the contractor to assure he properly carries out the contract, or discipline him where he fails. I will listen with great respect if you tell me you have any.

Mr. HEWITT. What we are really talking about is an interval where he doesn't have a contract at all, but which he is performing work. If we do not put that work on contract, he will not get paid.

Mr. DINGELL. But you have never failed to——

Mr. HEWITT. Put the work on contract.

Mr. DINGELL. And you never failed to pay him.

Mr. HEWITT. That is correct.

Mr. DINGELL. And you have never disciplined any employee, I can discern, for having issued these contracts or obligated the Government or for failure to properly supervise the conduct of the contractor's work.

You can't have me believe that this indicates that the millennium is at hand and the contractors are performing to perfection.

Mr. HEWITT. Really, I think it is important to separate, if we can, contractor performance from the question of whether or not the Department is entering contracts properly. I wouldn't hold the contractor to blame in this case——

Mr. DINGELL. I think you have a bad system. I think it defies proper supervision. I am not sure you have any way of knowing under these circumstances whether the contractor has applied with the contract, or whether the contract has been tailored to suit the work product of the contractor.

Mr. Fitzgerald, you nod affirmatively on that.

Mr. FITZGERALD. I have seen many instances of work being turned on without adequate definition. That would be what would bother me about this. One of the things that should be reviewed, but before obligating the Government at all, is the definition of what is supposed to be accomplished, and I think to permit, as we are told in the staff review, people to the level of GS-12's to obligate the Government with a cost to be covered later; that it is highly likely that you would get work or expenditures made for which you could not define a product and, therefore, couldn't tell whether they had done what the Department wanted done or not.

I think it is a matter of definition as well as legality.

Mr. DINGELL. Mr. Hewitt?

Mr. HEWITT. I don't have any argument with Mr. Fitzgerald on this issue at all. I think the extent to which it is acceptable—and it is not very acceptable under any circumstances—the extent to which it is acceptable at all is the instance where the work is initiated and well defined, but for which I have not gotten contractual coverage; in other words, a legal document. But I think the more fundamental point is that we have a deficiency in the system;

people don't understand they do not have this authority and to commit the Government in this way without the legal document is just not appropriate.

Mr. **Dingell**. We concur fully, and I applaud your statement, and I feel kind of bad having you up here with 4 months on the job, but somebody has to get at this, and I guess you are the only fellow here. I recognize the unfairness of it, but I also recognize the evils of the system, that you have to correct them, and one way we can see to it they are done is see to it that it is brought to your attention.

Mr. **Hewitt**. The report that GAO did and other information that we got that did bring this to my attention is exactly what has led to us immediately moving out to issue the notice for the Secretary to stand up in front of the senior management and make it crystal clear that it is an unacceptable policy, that he wants me to personally look at every example where this occurs in the future. But that doesn't solve the problem by itself. We have to get this well down into the organization.

Hopefully we don't have GS-12's doing this, but I wouldn't doubt that we do. It has to permeate the organization, and it goes back to Mr. Peach's comment with regard to training. People have to understand what they can and can't do and how——

Mr. **Dingell**. And clearly defined rules.

Mr. **Hewitt**. We have the rules.

Mr. **Dingell**. Do you really?

Mr. **Hewitt**. Well, I believe we have the rules.

Mr. **Dingell**. I don't detect they are as clearly defined as they should be. Maybe Mr. Fitzgerald and Mr. Peach want to comment on that.

Mr. **Peach**. I think in the ratification area what they have done is a big improvement over what they had. Ratification basically shouldn't occur except under highly unusual circumstances, because, among other things, you are committing yourself to a sole-source kind of approach for that particular contractor; you are making a selection or a choice at a relatively low level.

One of the things in their changed procedures that hopefully will make people think not once or twice but three or four times is the fact the commitments have to be approved by the Assistant Secretary himself, or higher.

Mr. **Dingell**. I concur in that.

Mr. Fitzgerald, you have a curious look on your face.

Mr. **Fitzgerald**. Mr. Chairman, I am utterly amazed that anyone would consider ratifying anything that has not been covered by a letter of intent or letter of contract. I have been a contractor to the Government, myself, and I must say I never expected to collect a dime for anything I did without at least a letter of intent or letter of contract. It does not take any time at all to put out a letter of contractor or letter of intent. Procurement people don't like to do that. It is an indication of sloppy practice, but it is not nearly as sloppy as turning on work without anybody's knowledge at the management level and ratifying it later on.

Mr. **Dingell**. You write the ratification to suit the work that has been done.

Mr. **Fitzgerald**. Of course. You define what has already been done and they meet the requirement.

Mr. **Dingell**. And you can comfortably pay.

Mr. **Fitzgerald**. Right. I think it is nonsense. I can't understand how contractors get to believing they have the authority to proceed and collect money without some sort of action from their procuring contracting officer. Everybody knows he is PCO. He knows who he is. He knows he is not authorized to proceed without word from the PCO.

Mr. **Dingell**. Doesn't it set up a circumstance where folks go around telling people to do work without defining what it is, have no yardsticks and then when the work comes back, you write the yardstick late in the process and, of course, that then shelters whoever it was that initiated the process and everybody else along the line, and no audit can castigate it because everything appears to comport one with the other. The work was done; the final agreement and all that sort of thing meshes neatly and tidily together.

Mr. **Fitzgerald**. Sure; you describe what you have already done.

Mr. **Dingell**. Mr. Hewitt, are we unfair in this comment?

Mr. **Hewitt**. I think there undoubtedly are cases where that has happened of the 21 instances that we have had.

Mr. **Dingell**. Let's put it this way; there is a rich opportunity for that kind of practice going on.

Mr. **Hewitt**. And it only goes to the fundamental deficiencies that exist in the system. I do believe, though, that a much larger percentage of these, and I couldn't possibly quantify, because it is an after-the-fact sort of situation that we are dealing with here, anyway, but I am very comfortable that the larger percentage of these are where people who don't understand the rules of the game, what they are authorized to do, and what they can't, enter into discussions with contractors.

We are dealing with a very different group of contractors. The major firms, as Mr. Fitzgerald suggests, would no more sit across the table from me and start work without a letter of contract, or some contractual vehicle that covers them. But we deal with a lot of small firms, and a lot of different people on both sides. Work gets started, and it is assumed that the contract vehicle exists. I don't enforce that. I think it is a terribie practice, and we are going to fix it. We are going to fix it quickly.

Mr. **Dingell**. And right. And again, I stress it is not you that is being castigated; it is the practice. What we are trying to figure out is what is going on. I should advise this hearing is not just to have the pleasure of kicking you folks at DOE around. It quite honestly is a part of our authorization process because since we have been going through this business, we have found this to be a matter of really genuine concern to the committee.

Mr. **Hewitt**. And I share many of your concerns.

Mr. **Dingell**. I am satisfied you do, and that is why I am distressed to have you here getting the benefit of this and sitting on the wrong side of the table.

Mr. **Hewitt**. If you will, sir, I believe we are all sitting on the same side of the table. Mr. Tashjian doesn't tolerate this practice, either. It is an unacceptable practice. What we have is a problem where we haven't been tough enough, in my view, on promulgating policy, raising the management attention level to the very top of this department, and getting the word out. That is being done now. Should it have been done 2 years ago, I would agree it should have been.

Mr. DINGELL. Well, the problems that you have had in organizing the Department—some of the problems that your antecedent agency had in terms of their behavior are not well concealed secrets.

Mr. HEWITT. He inherited, if you will, sir, a large mess.

Mr. DINGELL. I have been pointing that out for some years. Mr. Finnegan?

Mr. FINNEGAN. First of all, I want to ask Mr. Peach—are you satisfied that there is only 21 of these instances as far as you are concerned at the present moment?

Mr. PEACH. No, I am not satisfied. I guess the only thing I would say is we looked at a period covering August 1978 to September 1979, and that is the number we were able to identify during that period. My suspicion would be at this point there are others.

As Mr. Hewitt has indicated, I would hope that the types of practices that are instituted would lessen this happening in the future to where we would look and find few, if any, except in very exceptional circumstances.

Mr. FINNEGAN. In connection with the notice you did put out, Mr. Hewitt, I refer to page 2, which states that "If the Assistant Secretary or equivalent official concurs with the request for ratification, the request and concurrence must be forwarded to the Chief Financial Officer."

I assume that is you, and you will "review the request and the information submitted in accordance with DOE-PR subpart 9-1.405(c)(1) for action as follows."

The next step is, if the request does not appear to be reasonable as submitted, it will be returned to the concurring Assistant Secretary or equivalent official.

What happens at that point?

Mr. HEWITT. If we make a determination not to ratify, then either of two circumstances can occur. The contractor will not be paid; there will be no contract; the contractor will have done work for which he does not get paid, or the individual who commissioned the work, authorized the work, which he was not authorized to do, has the financial responsibility to make that contractor whole.

Mr. FINNEGAN. Shouldn't that be stated that that is the result of it?

I wonder, too, is the General Counsel to be consulted as part of this process?

Mr. HEWITT. I am sure in those few instances in the future, where these come forward, I will be in discussions on this matter with the General Counsel.

Mr. FINNEGAN. I am a little concerned, because if you are returning it back to the Assistant Secretary, I would like to know what really does happen to the General Counsel, because it could result in a lawsuit, it appears to me, by the contractor, if I am not mistaken.

Mr. **Yohalem**. It could well, Mr. Finnegan, but we would intend that we not voluntarily adopt liability under those circumstances, and you are right, there is always a possibility of a suit grounded in quantum meruit against the agency as well as against the individual.

Mr. **Finnegan**. That is why I think that the notice is sort of bland on that response and doesn't make it clear that under those circumstances that the individual—now I question which individual—is this the GS-12 who is going to be personally liable, or which individual? Is that going to be the person from whom he has the delegation?

Mr. **Hewitt**. It would be the individual who authorized the work.

Mr. **Finnegan**. Even though it was illegally authorized?

Mr. **Hewitt**. An Assistant Secretary can't authorize work.

Mr. **Finnegan**. Just——

Mr. **Hewitt**. All I am trying to say is it does not matter the level. It is a question of whether or not he has a warrant that allows him to place work on contract, and only procurement people have such warrants.

Mr. **Finnegan**. The next point is, it states: "If the request does appear to be reasonable, it would be forwarded to the head of the procuring activity as indicated in the request." Head of the procuring activity—who is that?

Mr. **Hewitt**. It would be to Mr. Tashjian, the Procurement Buying Officer, or the field office where the procurement function is housed. This notice applies across the Department field as well as headquarters.

Mr. **Finnegan**. But this says Mr. Tashjian retains final legal authority to approve the ratification. I thought you said earlier you were going to do that.

Mr. **Hewitt**. I don't have the authority either to write a contract. In other words, this would say that I would make a determination as to what the Department's course of action would be. If I determined to approve the ratification, then I would turn it over to the procurement function to develop the proper contractual instruments.

Mr. **Finnegan**. Could Mr. Tashjian turn you down?

Mr. **Tashjian**. Conceivably.

Mr. **Finnegan**. It seems to me that this is very vaguely written, and I have some difficulty in understanding how this would all work. I am not sure I understand under what circumstances it would be reasonable to forward the request. What would you determine to be reasonable?

Mr. **Tashjian**. There is an administrative chain, of whom Mr. Hewitt is the final element, in which a rationale is developed.

Mr. **Finnegan**. If Mr. Hewitt, for some reason, determines that it is reasonable to ratify a contract with a particular contractor, ratify a commitment to a particular contractor, and he tells you that he wants that done, am I correct in my understanding from this document that you could say: "Sorry, I am not going to do it"?

Mr. **Tashjian**. Well, I don't know that we would say that, but there might be supreme conditions. We might have to see if the man had an approved accounting system; there might be conditions precedent to our entering into a binding contractual instrument. I am saying there is an administrative chain, but once that procedure is complete, it has to conform to the procurement chain.

Mr. **Finnegan**. I am not talking about the mechanics of actually doing it. What I am concerned about is the final legal authority. That is apparently Mr. Tashjian, or whoever has been delegated that authority. It seems to me what he is doing, if Mr. Hewitt says it is OK, in fact you are going to go ahead and do it so long as the document comes out all right.

Mr. **Yohalem**. Mr. Finnegan, I understand your question, and I think it may be useful by way of clarification to indicate one purpose of this notice is to introduce into the chain of required approvals a senior level departmental official. It is not intended to displace existing responsibility for ratification.

Mr. **Finnegan**. This notice doesn't give guidelines under what circumstances it would be approved. It says if it appears to be reasonable. That is very vague, and, second, it shows that the Assistant Secretary and Mr. Hewitt have no great responsibility here, because they can't approve it anyway, either one of them.

Mr. **Yohalem**. But the approval of Mr. Hewitt is required as a precondition to the exercise of ratification by the contracting officer.

Mr. **Finnegan**. Why shouldn't the contracting officer also have the authority to disapprove, even if Mr. Hewitt says it is OK?

Mr. **Yohalem**. I think theoretically, at least, that is a possibility under the notice.

Mr. **Finnegan**. Shouldn't also the notice set forth the guidelines under which Mr. Hewitt would under any circumstances approve?

Mr. **Yohalem**. I think that is hard to anticipate what may be reasonable, and I understand your concern. I think Mr. Hewitt and others this morning have indicated an intention of really tightening up on this practice.

Mr. **Finnegan**. Shouldn't the notice also specify that the General Counsel has to be part of that approval?

Mr. **Yohalem**. I don't think that is essential, myself, Mr. Finnegan. Under the circumstances here we will be involved.

Mr. **Finnegan**. If you disapprove—if Mr. Hewitt comes to the conclusion under No. 1, that it shouldn't be approved, you will be faced with a potential lawsuit that you are going to have to recommend to the Justice Department. It seems to me that the General Counsel ought to be in on the ground floor as best he can.

Mr. **Yohalem**. I am simply saying I don't think it needs to be stated in the notice that we will be involved in the process. I think that will inevitably be the case.

Mr. **Finnegan**. Can we get a commitment that is the way it is going to work?

Mr. **Hewitt**. Absolutely. Frankly, one of the benefits, if there are any, of a notice over an order is that we will have some operating experience with this and decide whether or not we need to go further, or make adjustments to it before we turn it into something that is more lasting in that sense. Meanwhile, we have a way of operating that addresses, I believe satisfactorily, the question.

I must say if you called me up 6 months from now and said, "How many of these have you ratified?" my guess is—almost my certain guess is—that there are some that are probably working their way up the system right now before this was ever promulgated. It will be a clear signal to the organization as to what we do with those. Then we will have to look at the specifics that go with each case.

Mr. DINGELL. Mr. Hewitt, I think we are making good progress today, and I certainly commend you, but I am troubled. A lot of these things are relatively long term in terms of the impact that they are going to have, training, and things of that kind.

Don't you have to get something very quick out to the folks who deal with these matters in the earliest instance so they understand the steps they are taking can essentially lead to either contractual or quasi-contractual responsibility on the part of the Government, at least to a significant financial exposure by the Government, and that they have to deal with that in some kind of responsible fashion in the earliest instance, so this chain of events leading ultimately to the governmental liability does not take place? Is that a fair statement?

Mr. HEWITT. Entirely fair, just so. Which is the reason this DOE notice goes to every departmental employee, and paragraph 7 of it specifically addresses that individual's liability under this situation. If he makes an unauthorized commitment, he takes substantial risk of personally being liable for the cost incurred by the contractor.

I think it would be an extraordinarily exceptional case where we denied the contractor the cost incurred. There may be cases somewhere else in the Federal Government where that has happened. I am not aware of them.

Mr. DINGELL. You say here if the request does not appear to be reasonable as submitted, it will be returned to the concurrent Assistant Secretary or equivalent official. If the request does appear to be reasonable, it will be forwarded to the head of the procuring activity as indicated in the request.

Then you go on down and deal with the question of personal liability.

But ahead of that you say:

> The head of the procuring activity retains final legal authority to approve the ratification of an unauthorized commitment in accordance with DOE-PR subpart 9-1.405(b).

That kind of indicates to me you sort of have the right hand giveth, and the left hand taketh away, or vice versa.

Mr. HEWITT. I think it comes to just recognizing that I do not have contracting authority. I cannot write a contract.

Mr. DINGELL. Let me yield to counsel here. He has an observation to make.

Mr. FINNEGAN. Mr. Chairman, I was pointing out that while the test of reasonableness is going to be made by Mr. Hewitt, who doesn't have the final contract authority, the test of actually approving is going to be made by Mr. Tashjian, who will be told by Mr. Hewitt he should go ahead and approve, and the point we were making a minute ago is there is no guideline as to what the word "reasonable" means, and how that would actually be applied on a case-by-case basis. It leaves a great deal of flexibility.

Mr. Fitzgerald was going to comment, I think.

Mr. FITZGERALD. I would like to suggest that perhaps notice be published in the Federal Register or some other organ of official notice, saying that DOE henceforth would not do this, or perhaps the whole Government putting contractors on notice. As I say, this is a new practice to me. When I was in the business years ago, you would never expect to get paid. I think contractors should be put on notice that it won't happen any more.

Mr. FINNEGAN. I want to go on to another subject at this point. Mr. Fitzgerald, in your examining some of these contracts for the subcommittee, I believe you came across a proposal on November 16, 1979, to TERA, Inc., or to utilize TERA PERT charts and report on data problems in participating agencies for special coal project. Is that correct?

Mr. FITZGERALD. I recall the request for procurement, whatever it was.

Mr. FINNEGAN. That was a man named Herald Wiseman on the special coal project. I understand he put forth a proposal, and there was a note that he wanted it expedited. Is that correct? Is that your understanding?

Mr. FITZGERALD. Yes, if you are referring to the contract that I believe you are, it has to do with the request to secure services of an individual who presumably had unique expertise, and I think it included making PERT charts, and quite a file of urgent requests to move the matter along and issue the noncompetitive contract.

Mr. FINNEGAN. Does it sound to you that a PERT chart is sort of a thing that needs special expertise?

Mr. FITZGERALD. No, sir. You must know how to do it, but it is not in the least rare. When I first came to the Department of Defense, I ran a school called the PERT Orientation and Training Center, where we trained literally thousands of people. We closed it down because the market absorbed all the PERT trainees they needed. It is a fairly standard, straightforward technique at this point. There is nothing mysterious about it.

Mr. FINNEGAN. There is a gentleman referred to quite often. Apparently there seems to be a great many phone calls from this gentleman to the office that made this request, a man named Santone. The documents indicate Mr. Santone has a great deal of experience in PERT charts. He has over 25 years of experience in the consulting environment. He has directed, managed or personally conducted analytical studies in a broad range of subject areas, including transportation, energy, environment, injury prevention and protection, and a variety of military systems analyses. He has also had extensive experience as head of the policy analysis group concerned with high-level business-related issues. It goes on to say Mr. Santone had experience in the Federal Government as a former employee, including work for the Federal Energy Administration, the Federal Power Commission, the Department of Commerce, Energy and Transportation.

This contract seemingly moved along. Did it actually go out? Is it your understanding it was actually issued to this firm, or was there actually some effort to put it out on competition rather than sole source?

Mr. FITZGERALD. As I recall the documentation, it indicated the procurement office suggested this was not a unique capability, and that competition should be held, at which point or shortly after which, the originator withdrew the request for the services which previously had been described as urgent, and so on.

Mr. **Finnegan**. So there was competition, and all of a sudden—there is a note in here to Elnora Altman, Chief, Small Purchase Branch, Procurement and Contracts Management, from Mr. Wiseman, dated January 2, 1980, 2 weeks after the announcement, it stated:

> In accordance with our telephone conversation this morning and previous verbal instructions to your office, we are cancelling our request entitled PERT Charts and Report on Data Problems in Participating Agencies for Special Coal Project.

Can I ask why it was canceled? I think Ms. Altman is here today, is she not? We asked her to be here.

Mr. **Hewitt**. We would be happy to have her come up, but it seems to me the question really is not a procurement question, but a question of what changed in the program area that caused us to no longer have such a requirement.

Mr. **Finnegan**. I am interested in finding out to what extent your office had an impact resulting in that change. Are you aware of any impact on the office?

Ms. **Altman**. I am Elnora Altman, Chief of Small Purchase Branch. I had several conversations with Mr. Wiseman explaining that we thought that their work could be done by a number of people, and disagreeing with the sole-source justification. The delay in routing this paper through this system and our conversations may have changed his needs. My conversations do not reveal that, but his letter seems to indicate that. Their needs were changed.

Mr. **Finnegan**. He was trying to get you to expedite this matter, according to the telephone conversations and notes, is that correct?

Ms. **Altman**. That is correct.

Mr. **Finnegan**. Is this an example of how it happens in other cases? I mean is this—how do you ascertain on a case-by-case basis whether this should be by competition or sole source? In this case you apparently did get at the issue and suggest that it be not sole source. How do you do this in relation to all these contracts?

Ms. **Altman**. It depends on what the sole-source justification entails. If it is a time-critical need where the Department or the Federal Government would be injured or slowed down if we took the time to complete an action, then on occasion we have accepted this as justification. However, if there is time to go through the normal procurement process, and if the best interests of the Department and the Government would be served, we certainly could complete the action.

Mr. **Finnegan**. What time would a normal procurement process take?

Ms. **Altman**. When we are talking about small purchase actions, as this is, we are looking at perhaps a 6-week time frame.

Mr. **Finnegan**. This was first developed in November of 1979, and you went out on a—it was sometime in December, I believe, you went out for request for competition. Isn't that correct?

Mr. **Altman**. Yes, sir. The 6 weeks I was referring to was after it gets into our office. We are talking about advertising and evaluating the submission.

Mr. **Finnegan**. Do you have guidelines to these types of contracts, to look at all of these sole-source contracts to prevent this sort of thing from happening?

Ms. **Altman**. Absolutely. Sole source is the exception, not the rule.

Mr. **Finnegan**. Mr. Fitzgerald, do you have any comments?

Mr. **Fitzgerald**. No, this was one of those instances where it appeared to us a challenge by the contracting officer might have saved some money. As I recall, it wasn't a great deal of money; it was under the $10,000 threshold, as I recall.

In the process of this, we are questioning the procurement people about their ability to challenge requirements and sole-sourcing.

Mr. **Dingell**. It does appear that they are somewhat deficient in their ability to do so.

Mr. **Fitzgerald**. They indicated to us that they were, that even though they had the theoretical authority and responsibility to challenge, that, in fact, because——

Mr. **Dingell**. Is it inadequacy of the numbers of personnel? Is it inadequacy of authority? Is it inadequacy of the budget? Is it inadequacy of training? Is it inadequacy of support from higher up in the Department? Where is the deficiency among these options?

Mr. **Fitzgerald**. They indicated to us that the program offices were extremely powerful and sort of tough to oppose them, but in addition they were overwhelmed by the volume.

Mr. **Dingell**. As you are saying, there are not enough people there to do the work.

Mr. **Fitzgerald**. Assuming all that work is necessary, the statistics that we were given indicate that they might be somewhat overloaded, yes, sir. It's difficult to pass a judgment on across-the-board, because a number of the contracts were in the inactive status, and we could not determine which of the contracting offices had which mix of inactive contracts and active ones.

Mr. **Dingell**. You say some of these contracts are on an active status?

Mr. **Fitzgerald**. Inactive. They are simply waiting to be closed out, so it is difficult to tell, to say for sure how great a workload is imposed by simple numbers of contracts under their responsibility.

Mr. **Dingell**. Mr. Hewitt, maybe you can give us some comment.

Are you able to tell us whether you are having any review of the workloads of these people down there or whether you are having any reviews of whether or not all of those contracts ought to in fact be let, or whether you are having any review of the fashion in which the contracting officer, like the prior witness, is able to function, or whether they are in fact overloaded.

What comments can you give me on those points?

Mr. **Hewitt**. I would like to break them into two categories, if I might.

One is the manpower and staffing question. I think the workload statistics, if you just look at active contracts and the number of people in the Headquarters Procurement Operations Office, it shows substantial increase in the activity in that area.

I have had discussions with Mr. Tashjian on this issue, and it is indeed a fundamental part of the procurement study I mentioned in my opening remarks.

It's a matter of real concern to both of us, because what we do we want to do well.

Mr. DINGELL. I am satisfied that you do that. Let us take some instances of, Ms. Altman, who previously commented to the subcommittee, that she has five additional staff members. That is a total of six in her office.

They have to deal with 4,250 pending contracts and awards. They have procurement actions pending of 250.

Now, you have others. You come down and you have William A. Blumenauer. He has four additional staff members, 420 contracts and awards, and then he has pending procurement actions, 97.

Those are predominantly low dollar procurements. Then you have Mr. Callaghan who is next. He has 3 staff members, 180 contracts and awards, and 62 pending procurement actions, and he deals with major systems acquisitions.

Next one is Mr. William F. Gaudette. He has 7 additional members and contracts and awards of 1,250, pending procurement actions of 78. Now, his is surveillance of contract administrative function, selected elements delegated to DCAS.

You have got a whole group of others, and then you have some contracts which are added to those which are shown to be delegated substantially to other Federal agencies, that is, DCAS and ONR for administration close-out.

Can you tell me that those people are able to properly superintend this number of contracts?

Mr. HEWITT. I think that we are pressing the upper limit if we are not beyond it.

Mr. DINGELL. And are they capable of doing the preawarded investigations and challenges?

Mr. HEWITT. The consequences are that the backlog builds up, yes.

Mr. DINGELL. They have got to challenge whether this contract in fact ought to be let in the beginning and challenge whether it is properly carried out, monitor it and supervise it as it goes forward?

Mr. HEWITT. Clearly that is the fundamental part of their role.

Mr. DINGELL. Yes, but I detect that they have not been able to do so, or have not done so or your internal systems have not provided the mechanism to insure that they do or they can or they are properly trained or have the proper support or proper numbers of people, or that they will even be able to determine whether or not the contract ought to be let in the first instance.

Mr. HEWITT. I think the decision as to whether or not the work needs to be done in the first instance is not their responsibility.

Mr. DINGELL. Whose is it?

Mr. HEWITT. It is mine, if I ask for the work to be done.

Mr. DINGELL. If those people cannot do it, I am talking about 5,000, 6,000, 8,000, 9,000, or 10,000 contracts plus pending procurement actions of 400, 600, 800, 900, 1,300, 1,400 contracts.

Mr. HEWITT. It goes really right back to the point, sir.

I think it is the clear responsibility of the program areas to make the determination as to whether or not this work is essential to be undertaken this way. That is clearly a principle of those new notices, that I want to put the first part of this contract business in the line organization.

I want the procurement function to do just the kind of job Ms. Altman did. I want it to be a check and balance on the Department's performance. I want to be sure that if we have sole-source justifications, that they can stand the critical test of her review and an outside review, but the responsibility for deciding whether or not the work is appropriate to do is not hers at all.

Mr. **Dingell.** Whose is it?

Mr. **Hewitt.** The Assistant Secretary; the program director. It's the person who needs the work done in the first place. He is the person.

Mr. **Dingell.** Are you telling me that these people are capable of doing all of this work?

Mr. **Hewitt.** We have got two questions here. First of all, we have the question of who should determine whether the work needs to be done in the first place. I would urge you to consider that.

Mr. **Dingell.** That is part of it?

Mr. **Hewitt.** Yes; and when that comes in, the question is, does the Procurement Office have enough resources to thoroughly process that workload in a timely way, because when backlogs build up, problems begin to creep in.

Mr. **Dingell.** I detect they do not. Don't you have a problem that goes beyond this, that is making a decision whether it ought to be done in-house or contracted out and who makes that and who should make it, and that what attention is given to that?

Mr. **Hewitt.** The decision as to whether or not we do the work in-house or out-house is again a program office decision.

Mr. **Dingell.** Well, let me yield to counsel who joins me in differing.

Mr. **Finnegan.** Isn't there, at the time of the request, a series of regulations, guidelines, A-76, that have to be looked at supposedly by someone who has procurement knowledge as to whether this constitutes a violation of those requirements, whether they are management functions, carrying out a personnel function that could be carried out by Government personnel.

You have cited them yourself and the GAO has cited them. Who does that examination? Shouldn't that be Ms. Altman and not the program officer?

Mr. **Hewitt.** No; I don't think——

Mr. **Finnegan.** The program officer is not a procurement specialist?

Mr. **Hewitt.** Clearly, the issue as built into these notices, and there are dollar thresholds involved which do not totally go to fulfilling all of the provisions of A-76, but it goes in the direction of it, and that is, that where work for support service contracting is being procured in dollar values in excess of $100,000, we have required the approval of administration.

Why administration? Because that is where the manpower function in the Department is.

What you are talking about, Mr. Finnegan, is not a procurement function but a manpower function and a cost analysis function.

Mr. **Finnegan.** The administration, what administration?

Mr. **Hewitt.** In the DOE, Mr. Heffelfinger and his organization.

Mr. **Finnegan**. He does not necessarily know whether this work is work that is management related, does he? He does not know whether it is a management policy?

Mr. **Hewitt**. Now, we are sliding into the question of whether or not the work violates, if you will, the procedures with respect to whether or not we are contracting out basic management functions?

Mr. **Finnegan**. That is correct.

Mr. **Hewitt**. We are saying in that case, which is a different case than A-76——

Mr. **Finnegan**. Related case?

Mr. **Hewitt**. Indeed related, but the thrust of that, I don't need A-76 to help me work that question. We really go back to OMB Circular 7811 to describe those things which we can and cannot contract for.

Mr. **Finnegan**. Who on a day-to-day basis makes those kinds of decisions; not you?

Mr. **Hewitt**. Not me. The first decision is made by the program office, and the purpose again of those notices was to cause that justification to be written out in much greater than it has previously been and then subject to review both by the procurement function, and if it hits a certain dollar threshold by our administration function, which is where the manpower activity is in the first place——

Mr. **Finnegan**. What about the Procurement Office?

Mr. **Hewitt**. And also the General Counsel is involved in that, sorry.

Mr. **Finnegan**. You mean to tell me every one of those contracts runs through Mr. Heffelfinger's operation, the General Counsel and Procurement Office for everything over $100,000? How about under $100,000? What is the magic of $100,000?

Mr. **Hewitt**. Simply the matter we were talking about with respect to manpower. We had dropped the ceiling in this directive from $250,000 down to $100,000 to get more control. I did not add any new staff to that function to allow that to happen. I just told them they are going to have to work a little bit harder.

Mr. **Finnegan**. They are now handling a lot of contracts. Let's take under $100,000; who examines it for those policies and so forth?

Mr. **Hewitt**. The Procurement Office has the responsibility of looking at this documentation package to insure that check and balance that I talked about.

Mr. **Finnegan**. The check and balance?

Mr. **Hewitt**. What I am saying the procurement function is always involved in that.

Mr. **Finnegan**. They have to look and challenge it.

Mr. **Hewitt**. Yes, sir.

Mr. **Finnegan**. As the chairman has raised the question, though, do they have the adequate time and staff to do that, considering the magnitude of contracts that they are handling on a day-to-day basis?

Mr. **Hewitt**. I am not prepared to comment on that today. I am concerned, and I share your concern that the data would suggest that the load is too heavy for this staff to handle. It's the subject of a study which will be done in the very near future.

We undertook that study to try to look at what our real health is in this area, and if we need to address it we will address it as part of the 1982 budget cycle.

Mr. FINNEGAN. How much time did you spend or somebody on your staff spend on this one contract with the Tier Co. to determine whether or not that should have been a sole-source procurement?

Ms. ALTMAN. Probably 2 more days all together.

Mr. FINNEGAN. How many contracts do you handle on a day-to-day basis, or do you get on a day-to-day basis?

Ms. ALTMAN. They are not all like this. These kinds of things are a percentage of the other. Our office handles a goodly number.

Mr. FINNEGAN. How many other contracts are challenged?

Ms. ALTMAN. Possibly 10 percent of our sole-sources are challenged deeply.

Mr. FINNEGAN. How many are not challenged deeply?

Ms. ALTMAN. Probably another 25 percent. The rest pretty much stand on their own.

Mr. FINNEGAN. Not all of them are looked at and challenged?

Ms. ALTMAN. Challenged and looked at are different things. I look at every one of them any time there is a sole source.

Mr. FINNEGAN. What involves a challenge? What do you mean when you talk about challenge?

Ms. ALTMAN. If the sole-source does not stand on its own in my opinion, and that is all I can go by, we question the Program Office and perhaps individual data, perhaps they change their minds, encourage them to look at the competitive source.

Mr. FINNEGAN. Does the operation permit you to spend much time in that operation to do that?

Ms. ALTMAN. Not personally, but I have good people such as the lady who did this.

Mr. FINNEGAN. Mr. Fitzgerald?

Mr. FITZGERALD. Yes; I would like to comment on some things. Mr. Hewitt mentioned they lowered the ceiling over the threshold rather to $100,000. That is the A-76 threshold that I covered in my testimony.

I think there is sometimes, often I should say, a problem of having the contracting out versus in-house evaluated solely by manpower. That is the dominant cost element involved, but there are others as well which make it more appropriate to have the evaluation done by the Controller function.

There are other considerations, other elements of cost that are involved, so I think it would probably be more appropriate in a general set of circumstances to have manpower make an input to it, but not be responsible for the overall job.

Mr. FINNEGAN. Mr. Hewitt?

Mr. HEWITT. Mr. Fitzgerald and I have gone around and around but from the same side of the table on that issue in previous days. The A-76 reviews that we have in the Department today are reviews that are managed by the Controller.

As I tried to mention, these support service contract decisions that come through, we were just saying, they have gone as well through the manpower check of our administration side, that the cost analysis function, all costs beyond personnel are included in these comparisons.

Mr. FINNEGAN. But you would agree, would you not, that the statistics indicate that some of these challenges that Ms. Altman was talking about are not very real if they have to handle this number of contracts?

Mr. HEWITT. Clearly you are always going to be talking about a sampling in that sense taken back by manpower constraints. I am not going to walk away from that, which is why I want to put the burden back in the program areas in the first instance. They have got to decide that their requirements are there and that the thing is well justified, and I want to have as many checks and balances on the system as we can possible and meaningfully bring to bear.

What we are doing is the best we can with the constraints that we have, but what I worry about is not only the detail that does not get applied, but also the backlog that builds up, kind of the tension that then builds between the program areas and the procurement areas and sort of the deficiencies and errors that creep into a situation when that happens.

I think this manpower aspect of this is an important part. I must say, however, that there are others. One of the things Mr. Fitzgerald said earlier, which I again agree with, is if all of the work is necessary or perhaps another way of saying it, are there other ways of doing the work that takes some of the labor intensity out of the picture, and the answer to that question is yes, we have done an awful lot to kind of automate some of this function which lends itself to standardization.

We are trying to get much more standardized in our approaches to take the labor intensity out of the procurement function and trade it off between those alternatives.

Mr. FINNEGAN. Did you in connection with this present budget for fiscal year 1981—you or Mr. Tashjian—request additional personnel not included in that budget request?

Mr. HEWITT. It all depends on which level you want to go to.

Mr. FINNEGAN. Start from the bottom.

Mr. HEWITT. I suspect there were some that came up to Mr. Tashjian that didn't get up to me that didn't get up to OMB.

Mr. FINNEGAN. Provide us the paper that shows us exactly what that is, from below Mr. Tashjian to you, to Mr. Hewitt on up through the Department.

Mr. HEWITT. We are trying to reconstruct it, and we will provide it to you for the record.

Mr. FINNEGAN. We would like to get it since we are going into markup next week, and also the dollars involved, if you were to get those people.

[The following letter was received for the record. Attachments referred to may be found in subcommittee files.]

Department of Energy
Washington, D.C. 20585

[illegible]

Honorable John D. Dingell
Chairman, Subcommittee on Energy
and Power
Committee on Interstate and
Foreign Commerce
U. S. House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

During the hearing on Friday, February 29, 1980, your committee requested us to reconstruct the paper trail for the FY 1981 budget for the Procurement and Contracts Management Directorate with particular emphasis on the Office of Procurement Operations. In compliance with that request, the following documents are submitted:

a. Office of Procurement Operations FY 1981 budget requirements which requested 129 people for FY 1981. This request represented an increase of 33 positions over FY 1980.

b. The Procurement Directorate's FY 1981 budget submission which requested 259 positions for FY 1981. This represented an increase of 37 positions over FY 1980 of which 26 were requested for Procurement Operations.

After internal hearings, the Department requested OMB to provide 242 positions for the Procurement and Contracts Management Directorate, 241 of which were sustained through OMB hearings and appeals procedure and are now contained in the FY 1981 congressional budget. This represents an increase of 19 positions, over FY 1980, but allocation of the 19 positions among the various offices of the Procurement and Contracts Management Directorate has not been approved.

Other documents and information which you requested will be forwarded shortly, but it was our understanding that you desired the above information at the earliest possible date.

Sincerely,

/S/

John A. Hewitt, Jr.
Chief Financial Officer

Enclosure

Mr. Hewitt. The dollars are not very significant, because we are talking about relatively small numbers of people.

We do have, I believe, 10 procurement personnel in the fiscal year 1980 supplemental associated with three basic functions, the schools and hospitals program, three folks working on the MX joint program with the Department of Defense, Department of Air Force, and three folks working on the small and disadvantaged business unit.

Mr. Finnegan. Two more questions, and I think in your statement you said that all of the quick reaction contracts presently support the work of ERA and the Buildings and Community Systems Division of the Assistant Secretary for Conservation for Solar Energy.

Why is it so essential that they have this kind of process and no other part of the Department?

Mr. Hewitt. I think ERA was the first to identify the pressing need for this kind of vehicle and that vehicle was then set up in September of 1978.

Mr. Finnegan. Do we have the correspondence that came from ERA that would indicate that ?

Mr. Hewitt. What their requirements were?

Mr. Finnegan. Yes; did they ask for this sort of vehicle and we would like to have any memorandum or correspondence you have.

Mr. Hewitt. Whatever we have that is written we will provide.

[The following information was received for the record:]

Department of Energy
Washington, D.C. 20461

April
~~March~~ 20, 1978

MEMORANDUM FOR JOE CAPPELLO
CHIEF
PROCUREMENT OPERATIONS

FROM: DOUG ROBINSON
ASSISTANT ADMINISTRATOR
REGULATIONS & EMERGENCY PLANNING, ERA

SUBJECT: JUSTIFICATION FOR QUICK REACTION CONTRACT FOR THE OFFICE OF REGULATIONS AND EMERGENCY PLANNING

Recently, Jim Brown, a member of my staff, met with Tom Keefe and Ron Loggerwell of the Office of Procurement to determine whether the Quick Reaction (Umbrella) Contracts used by FEA will still be a procurement instrument for DOE contractual purposes. They gave assurance that these contracts can still be used providing certain requirements, which they identified, are satisfied.

Attached for your approval is a Procurement Request for a Quick Reaction Contract for the Office of Regulations and Emergency Planning. I am certain that you are very much aware of the high priority which the President and the Secretary of Energy have assigned to energy programs which pertain to the rationing and the conservation of fuels; the development of standby regulations for managing the fuel pricing and allocation programs; and short-term emergency planning programs such as WEEP for off-setting the adverse effects of fuel crises resulting from a severe winter, a coal strike, or other similar factors. The Office of Regulations and Emergency Planning is responsible for accomplishing the requirements of those programs. The emergency nature of these programs necessitates that I possess the capability to react quickly without the delays associated with normal procurement procedures. The resources that I have available do not afford me this capability. This Quick Reaction Contract, therefore, is necessary to give me the flexibility I require and allow me to satisfy my mission requirements effectively.

I request your approval of this contract without delay.

Attachment

Effective as of October 1, 1977, the Department of Energy established as one of its principal operating elements the Office of Economic Regulatory Administration (ERA). Among the major responsibilities assigned to the ERA was that of developing the regulatory programs for oil, coal conversion and (with the FERC) natural gas in order to carry out the National Energy Plan and both the petroleum contingency plans and the standby regulations necessary to mitigate the adverse impacts of another severe energy-supply disruption such as that experienced during the oil embargo of 1973. Within the ERA, the mission of accomplishing these requirements was assigned to the Office of the Assistant Administrator for Regulations and Emergency Planning (AA for R&EP). The specific functions of the Assistant Administrator for Regulations and Emergency Planning are as follows: To

- develop ERA policy and criteria with regard to the implementation, revisions, and termination of regulatory programs of ERA.
- develop regulations to implement DOE regulatory authority with respect to the allocation, pricing, and distribution of oil and (with the FERC) natural gas, and the use of coal and other fuels.
- coordinate ERA regulatory policy with other elements of DOE and other Federal agencies.
- provide appropriate support as necessary relative to the development and processing of the legislative initiatives of the Administration.
- develop regulatory analyses (per Executive Order 12044) and environmental assessments of proposed regulatory and contingency programs, plans and actions for which the Assistant Administrator of Regulations and Emergency Planning has assigned responsibilities.
- develop, coordinate and finalize rules for program operation and implementation.
- develop DOE regulatory policies and programs to deal effectively with major and short-term energy supply interruptions and other energy emergencies.
- develop emergency preparedness programs and plans to the point of complete standby readiness, and provide policy coordination and assistance for full program implementation during an actual energy emergency.
- analyze and evaluate the operational effectiveness of various regulatory programs and activities and recommend improvements as required.

The organizational entities of the Office of Regulations and Emergency Planning which are assigned specific elements of its mission are as follows:

- Petroleum Allocation Regulations Division, which is responsible for determining the need for developing, monitoring, evaluating and assessing the impact of regulations pertaining to the allocation and importation of crude oil, refined petroleum products and natural gas liquids.

- Petroleum Pricing Regulations Division, which is responsible for determining the need for developing, monitioring, evaluating and assessing the impacts of regulations pertaining to the pricing of crude oil, refined petroleum products and natural gas liquids.

- Natural Gas Regulations Division, which is responsible for developing, monitoring, evaluating and assessing the impact of regulations and programs within the jurisdiction of the Secretary of Energy relating to natural gas and supplemental natural gas supplies such as liquified natural gas (LNG) and synthetic natural gas (SNG).

- Coal and Electricity Regulations Division, which is responsible for developing, monitoring, evaluating and assessing the impact of regulations and programs relating to the mandatory coal conversion program under the Energy Supply and Environmental Coordination Act (ESECA) and the National Energy Act. The Division is also responsible for effecting coordination with the Office of Utility Systems to ensure consistency between electricity regulations and regulatory policy for other energy types.

- Major Emergency Programs Division, which is responsible for developing to the point of implementation readiness, comprehensive energy shortage contingency plans and gasoline rationing programs for use in major energy emergencies, such as embargoes, consistent with legislative mandates and Administration policy.

- Short-Term Emergency Programs Division, which is responsible for developing and implementing comprehensive energy shortage contingency plans for use in short-term national or regional energy emergencies, such as severe weather conditions, work stoppages and electrical blackouts.

- Emergency Mobilization Division, which is responsible for developing, implementing and testing emergency response capability through executive reserve and other programs in order to maintain the operation of the coal, natural gas, oil and electrical industries during a national emergency.

The regulatory programs developed by the Assistant Administrator for Regulations and Emergency Planning must often be instituted in quick reaction to legislative mandates or shifts in government policy to reflect rapidly changing energy supply situations. For this reason, it is important that the Assistant Administrator have quick response capability to do necessary economic and other analyses of proposed regulatory intiatives.

Many of the program development responsibilities of the Assistant Administrator for Regulations and Emergency Planning are of an emergency nature; and world tensions are such that it is impractical to assume that the United States will not be confronted with another emergency such as a severe energy supply distruption in the near future. The programs of the Office of the AA for R&EP are designed to offset the adverse affects of a crisis which a condition of this type would generate. For this reason, it is necessary for these programs to be made ready for immediate implementation and operation.

Typical legal and/or regulatory documentation which will provide the major reference material for this contract are as follows:

- o National Environmental Policy Act
- o Federal Energy Guidelines
- o Energy Policy and Conservation Act
- o National Energy Plan
- o Emergency Petroleum Allocation Act
- o Clean Air Act
- o International Energy Program

Mr. **Hewitt**. It seems to me where we are is that a year later also subject to a lot of pressure, the conservation and solar area came forth and requested such a vehicle. We now have pending a departmentwide capability, if you will, that we are going to set up vehicles that are not tailored to the individual requirements of a program assistant secretary, and that is a separate procurement that is expected to be awarded in the June–July time frame.

Mr. **Finnegan**. You have a quick reaction work order master contracts, I have a list here, and one of them is for area work C contingency plans and regulations development, and you have 10 contractors. Why would contractors be out doing work on regulation development?

Mr. **Hewitt**. Well, those are all contracts that ERA has.

Mr. **Finnegan**. I understand that. Why isn't that in-house responsibility?

Mr. **Hewitt**. They are. The responsibility of promulgating regulations is clearly a departmental responsibility.

What we have gone to the outside world to do is by analysis of alternatives, the impact of various regulatory actions that will assist us in deciding what the right regulatory process ought to be.

Mr. **Finnegan**. Would you provide to us the copies of the contracts and actions that have taken place under that area work C contingency plan and regulation developments to date, so we know what kind of analysis and regulation development they have been doing in this area?

Mr. **Hewitt**. Yes, sir.

[The documents referred to may be found in subcommittee files.]

Mr. **Dingell**. Let me ask you a question. Let's say those folks have other clients for whom they work who would have an interest in the different regulatory judgments to be made. How do you assure, first of all, that they have no other clients who have an interest in the regulatory support activity in which they engaged?

Mr. **Tashjian**. We have developed an organization conflict-of-interest clause, and you will recall the hearings last year in which we talked about the Stone and Webster contract.

Mr. Bardine was here. We have always had an organization conflict-of-interest clause. I don't think we were too alert to its requirements in the regulatory area, because we had an R. & D. background. As a result of that hearing, we did develop additional language, and we now mandate in every contract this clause in a regulatory area.

This clause says that you must give us a disclosure statement. You must reveal to us areas in which you have a potential conflict.

Mr. **Dingell**. Did you make a conflict-of-interest determination in connection with the contract Mr. Finnegan was just discussing with you?

Mr. **Tashjian**. Oh, I am sure that determination was made.

Mr. **Dingell**. Would you submit that to us, please?

Mr. **Tashjian**. I will have to look at the day of implementation.

Mr. **Dingell**. This is related to a regulatory action to be taken by a regulatory agency within your agency, is it not?

Mr. **Tashjian**. Yes, sir.

Mr. **Dingell**. Let us say this same company that you have hired as a contractor were to come forward and present exactly the same document; if it were not a Government contractor, it would be banned as an ex parte communication, would it not?

Mr. **Yohalem**. I am not sure we understood the question.

Mr. **Dingell**. If in the course of the regulatory proceeding that this would be a part of at the ERA, the contractor were to come forward and present precisely the same document to ERA in the course of a regulatory proceeding, that presentation, if made outside of the regulatory hearing, would be regarded as an ex parte communication and would be banned as an ex parte communication, would it not?

Mr. **Yohalem**. I think the answer there might depend upon the nature of the proceeding as to whether it is a rulemaking or adjudicatory proceeding.

Mr. **Dingell**. Let's assume it is rulemaking.

Mr. **Yohalem**. I don't think it would be correct to characterize that as an ex parte communication. The law in the area is not firmly settled, but I don't think to characterize it as an ex parte communication is necessarily correct. In an adjudicatory proceeding, you are correct.

Mr. **Dingell**. I happen to think it is an ex parte communication in other instances, but in an adjudicatory proceeding it would clearly be so?

Mr. **Yohalem**. That is correct.

Mr. **Dingell**. If you are talking about regulation, are you aware of anybody that would be able to make this kind of submission outside the regulatory hearing record to the ERA?

The only person that can do this outside the regulatory hearing record at ERA is the person that it has been contracted to in connection with the regulatory matter?

Mr. **Yohalem**. I think that is generally correct.

Mr. **Dingell**. Everybody else is bound by the rules of putting it into the record?

Mr. **Yohalem**. I might point out in this area, knowing of your long concern and support of section 33 of the FEA Act, that in the last year we really have made measurable progress in this specific area. We are on a task basis under the Quick Reaction Work Order system reviewing each task for organizational conflict of interest.

Correct me if I am wrong, Brian.

Mr. **Dingell**. I applaud that.

Mr. **Yohalem**. It is very rigorous and, going back to your question, I think that the possibility of a biased product getting into the regulatory system undetected is substantially less today than it could have been in the past.

Mr. **Dingell**. I applaud that, but it still leaves us in the awkward and unfortunate position of being able to say that either in some regulatory processes and in almost all adjudicatory processes, if this were submitted outside the regulatory record, that the work product of the contractor could be regarded as an ex parte communication.

Mr. **Yohalem**. That is correct, assuming that the contractor was a party.

Mr. **Dingell**. Assuming, yes, assuming he were a party. He does not have to be a party, but he may represent folks who are parties in connection with the rest of his life and his other business, because he does not work exclusively for you folks.

Mr. YOHALEM. The point here is we do not conduct adjudicatory proceedings which to my knowledge we are using contractors to provide services.

Mr. DINGELL. You take the position, with a regulatory process, that it is not ex parte? I am not so sure that I would be comfortable with that, if this fellow were not a contractor to the agency.

Mr. YOHALEM. Mr. Chairman, the parties, the contractors that we employ in the regulatory process are not intended to make the decisions on the policies but to provide us with information or analyses that will support those decisions.

Mr. DINGELL. You won't deny that those do have an impact on the decisions and could very well have greater impact than all of the other input that comes in?

Mr. YOHALEM. Of course; we wouldn't be contracting for that work if it wasn't. You are quite correct.

Mr. DINGELL. I don't want to see you contract for worthless information, but in like fashion, I am troubled with contract input into regulatory activities. It tends to offer great opportunities to preference one inside over others.

Mr. FINNEGAN. One last question. I don't believe you can answer this right off the top of your head, but I would appreciate if you would examine two contracts in connection with how contracts are being challenged as to whether they should be sole-source or competitive or as to whether they are duplicative of each other.

One is the contract that was signed by Mr. Cappello as the contracting officer on April 9, 1979; and it involves the Computer Science Corp., contract title "Management Information Systems Support Services for the Office of Program Management Support."

The second one is, it was also signed by Mr. Cappello on April 27, 1979, for the EDA Federal Corporation. It's with the same contract title. The statement of work in both versions is pretty close to being the same.

I wonder what kind of review or examination was made of this one to determine whether this one meets all of the criteria and whether in fact both of them were needed and should have been awarded.

Mr. HEWITT. Your records would show those were sole-source procurements.

Mr. FINNEGAN. I do not know whether they were. I can't tell.

Mr. HEWITT. Both of those contracts, it turns out, were done for the Controller. They were both competitive contracts.

Mr. FINNEGAN. The question is, are they the same? They seem to be the same amount and type of work.

Mr. HEWITT. We can distinguish clearly for you between the type of work that is involved in material submitted for the record. Would that satisfy you?

Mr. FINNEGAN. The statement of work is almost identical.

Mr. HEWITT. I know we are talking about different systems.

[The following information was received for the record:]

Request - Provide an explanation of the differences in contracts to EDS Federal Corporation (EDSF) and Computer Sciences Corporation (CSC).

Following is an explanation of differing requirements under DOE Contract No. DE-AC01-79-CR-10001 (CSC) and DE-AC01-79CR-10000 (EDSF):

There are three major programmatic differences between CSC and EDSF are as follows:

(1) Who they support;

(2) The types of programs which they offer;

(3) EDSF is Headquarters only, CSC's DOE-wide.

Specifically:

CSC is principally in support of systems analysis and development for program/project offices in DOE, i.e., Fossil Fuels, Solar, Conservation, etc. as well as DOE wide systems. Another distinction is that all of CSC work is designed for manual systems. Examples of CSC tasks are as follows:

- Planning Programming Budgeting System
- Uniform Contracting Reporting System
- Field Office Reporting System
- Management Information System Long-Range Plan
- Federal Energy Management Plan

EDSF provides business information systems for staff offices, i.e., Office of Controller, Office of General Counsel and Procurement. EDSF does all of the automated systems. Examples of EDSF tasks are as follows:

- Business Management Information System
- Integrated Procurement Management Information System
- Washington Financial Information System
- Headquarters Accounting System
- Financial Management Information System Screen Programming
- Automation and Integration of Congressional Budget Tables
- Systems Review Inventory
- Grants Processing System Hospitals/Schools

Mr. **Finnegan**. That is all, Mr. Chairman.

Mr. **Dingell**. Gentlemen, we thank each of you very much for your assistance to us.

Mr. Hewitt, as I have indicated to you, you are in a happy position of not being criticized for your own performance, but solely for the performance of the Department.

We hope that through some rather heroic undertakings you are going to be able to direct those criticisms.

Mr. Peach, we always thank you and your associates from the GAO. Mr. Fitzgerald, your labors in public interest are well known, not only on this subcommittee but many others, and we thank you again for your assistance.

Gentlemen, we thank you all.

The subcommittee will stand adjourned.

[The following statement was received for the record:]

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February 21, 1980

Statement for Herbert R. Epstein
Senior Legislative Representative, Solar Lobby
and
Curt Biren, Budget Project Coordinator
Solar Lobby
Before the
Subcommittee on Energy and Power
Committee on Interstate and Foreign Commerce
House of Representatives
on
The Department of Energy FY-81 Authorization

Mr. Chairman, members of the committee:
Once again, we are pleased to have the opportunity to submit testimony to this subcommittee.

The Solar Lobby is a research and advocacy group based in Washington, D.C., supported by contributions from 30,000 members. We believe that an expeditious transition to the use of renewable energy resources, combined with agressive programs of energy efficiency must be the basis for national policy.

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Up to 94 percent of the population supports an extensive federal effort to speed the development of solar energy. Available evidence also indicates that solar power ranks highest in the public's evaluation of energy alternatives. An NBC-AP poll, released in May, 1979, asked a random sample of 1,600 adults what their preferred energy source was for the year 2000. More than 50 percent chose solar; 21 percent selected coal; only 16 percent preferred nuclear and less that 5 percent favored oil.

The poll also supports the contention that the public is willing to pay for widespread use of solar energy -- assuming solar is more costly. According to the poll, Americans would each pay up to $80/year more for solar energy, if we compute the weighted average of all responses. This amounts to $17 billion/year for the population as a whole. For all individuals, the response may be interpreted as applying to households rather than individuals. If that is the case, then the public in the aggregate would pay about $8 billion per year for solar energy.

In part, because of the political popularity of solar energy, President Carter committed the nation to supplying 20 percent of its energy from renewable resources by the year 2000. Unfortunately, the goal is still largely rhetorical. It appears to have had no impact on the FY-81 budget request for DOE.

We would like to review some of the background of the 20 percent goal and its relationship to the DOE budget for the committee. The 20 percent goal was an outgrowth of the Domestic Policy Review of Solar Energy. The DPR was initiated on Sun Day, May 3, 1978. It was originally scheduled for completion by mid-August, with presidential decisions slated for mid-September. This rather unrealistic timetable was developed so that the recommendations of the DPR could be taken into account in formulating the FY-80 budget request.

In fact, presidential decisions were delayed until June, 1979, more than seven months after the belated completion of the DPR in December, 1978. Nevertheless DOE utilized the preliminary results of the DPR in presenting its FY-80 budget to OMB. The $750 million request was cut to $650 million by OMB. DOE's appeal was denied by the president.

The $750 million proposed authorization for FY-80 was formulated to be consistent with the DPR middle case -- the basis of the 20% goal. The administration's actual request was business as usual.

The budgetary submission for FY-80 preceded the president's decision on the 20% goal by 7 months. However, there was plenty of time to reformulate the FY-81 budget request to be consistent with the goal.

The minimum solar program for FY-81 should be the FY-80 DOE recommendation, adjusted for inflation -- about $845 million. The actual request of $707 is less in actual dollars than the FY-80 middle case recommendation. In real dollar terms, the FY-81 request is lower than the FY-80 "business as usual" amount. The DOE solar programs have a lower priority after the 20% goal was selected than they did before it was announced.

Unless Congress actively intervenes, there will be no change in priorities during the FY-82 budget cycle. My understanding is that the preliminary guidance levels for the DOE solar and conservation area will barely allow the programs to keep pace with inflation.

During the FY-81 cycle the preliminary guidance and the final submission were almost identical for many of the technologies.

There is an additional opportunity to redirect the budgetary process. SERI is currently exploring a series of strategies to attain the 20% goal, in combination with a substantial energy efficiency program. The SERI study is a welcome, if belated follow-up to the DPR. However, it will be an academic exercise unless it examines the changes in federal programs, including funding levels, that are necessary to achieve both the 20% goal and increased energy efficiency.

The "Budget in Brief," like so many of the Carter Administration's documents, says the right things.

"The Department's highest priority programs are designed to reduce the growth of energy demand by encouraging and providing the means for more efficient use of energy."

"In recognizing the potential economic, environmental and national security benefits of solar energy and the need to begin a transition to long-term reliance on solar and renewable, the President has committed the Nation to supplying 20% of its needs from solar energy, including hydropower, by the turn of the century."

Yet solar and conservation combined received less than 30% of the DOE energy budget. Their share of the overall DOE submission is 13%.

It is time to realign the reality with the rhetoric!

In regards to the particular solar programs of concern to this subcommittee, we would like to make some specific comments and recommendations.

First, the federal solar buildings program is being terminated in the proposed budget. A total of only $2 million is being requested, in order to complete projects selected in FY 1980. In our judgment, this is contrary to the intent of the National Energy Act and disregards the enormous impact that this program could have on the use of solar energy in the future.

As you know, the National Energy Conservation Policy Act authorized this program for three years, from FY 1978 thru FY 1980, at a total of $100 million. The proposed rules for the program were not issued until April, 1979, because of the delay in the passage of the National Energy Act. The final rules were published in October, 1979. The actual proposals for the program were then accepted in January of this year, after the life-cycle costing rules were issued. The first contracts to the agencies will be made no earlier than the end of March. Thus, 6 months before the end of FY 1980, this three-year-program is just beginning.

As of February 12, 878 proposals totalling $54 million had been submitted by the agencies. However, there is but $47 million available for these and other new projects. This will provide funding for only 200 to 300 project. Under the original authorization, 350 to 550 projects should be funded. The administration is now requesting $2 million for FY 1981 to close out the program.

We feel that this program is extremely worthwhile and should be continued. As the Office of Technology Assessment noted in its 1978 solar energy study, "A major program for installing solar equipment on Federal buildings could be one of the Government's most powerful tools for encouraging the development of mass production of solar equipment by private industry." Also, the General Accounting Office, in its August, 1979 report, recommended that the program be fully funded and extended, in order to meet the program's legislated manadates.

It is clear that without funding, federal procurement of solar energy equipment will be minimal. In FY 1980, the federal government, excluding the Department of Defense, will only spend an estimated $5 million on solar hardware. The Department of the Interior has expressly indicated to DOE that it will not support many solar projects unless more funds are available.

In order to meet the objectives of this programs, we urge the committee to authorize an additional $3 million. This will allow the program to continue at least for a duration of three years, as originally authorized in NECPA, and will permit the total number of projects envisioned to be implemented.

Second, as a result of some confusing budgeting in the market analysis program, $1.2 million has been taken from the proposed funding for agricultural and industrial process heat market studies in order to restore funds for wind energy market studies. We support the restoration of funding for the wind program. However, the proposed budget for AIPH under this program now totals only $400,000. We urge the committee to restore $1.2 million for AIPH to ensure that the appropriate market analyses needed to facilitate the commercialization of AIPH will be undertaken.

Third, in regard to the proposed budget for the state and local energy management programs, we have submitted separate testimony to this committees on these programs. We urge the committee to support a budget authorization consistent with the provisions in both the Administration's EMPA and Senator Tsongas' proposals for community energy development.

Fourth, the proposed budget for market development and training does not adequately address certain key areas. For education, the budget request is $1.9 million, which is $300,000 less than the current budget level. In our judgement, cutting the budget at this time would greatly hinder the government's efforts to widely disseminate solar educational materials to the nation's students.

As you know, the funding for this program is for the development and dissemination of solar curricula to elementary and secondary schools nationwide, and for workshops and meetings for school supervisors, principals and teachers to familiarize them with the curriculum materials. The materials are intended to be integrated into existing studies.

It is vitally important that these materials be widely available to ensure that today's students, who will be tomorrow's consumers, will be informed about the uses of solar energy. Yet, the great demand for solar curricula severely exceeds the supply. The national Sun Day office, for example, received over 70,000 requests for solar education packets after only a small attempt to announce their availability. It is also critical that workshops be held in all parts of the country to familiarize teachers with these materials.

The proposed budget will not be adequate to support wide dissemination of these materials, especially in light of DOE's new rule that requires each program office to pay all its printing bills over $2,500. Less than 10% of the 100,000 elementary and secondary schools across the country will be able to obtain materials and even a smaller fraction of schools will be able to participate in the workshops and meetings. We urge this committee to authorize an additional $1 million for this important program.

For standards, testing and certification, there is no mention of support for site-built active systems, nor for the involvement of small businesses and consumer groups in the development of standards. Site-built systems have enormous potential. While commercially-manufactured active systems may cost $50 per sq. ft. installed today, site-built systems cost less than $20 per sq. ft. installed. Yet, the private standards, testing and certification groups have not included site-built systems in their activities. We would like to recommend that this committee insert language into the authorization report, which instructs DOE to provide support for testing of site-built system designs, and for studies on the certification of site-built systems.

In order to ensure the active participation of small businesses and consumer groups in the development of standards, we would like to recommend report language directing that support for these groups in the standards-setting activities be continued.

This concludes our prepared statement. We would like to reiterate that the budget request reflects no urgency, no commitment, no attempt to systematically begin a course of direction which will lead us toward our goals. We look forward to working with the members of this committee and their staff in providing strong support to solar energy.

[Whereupon, at 1:35 p.m. the subcommittee adjourned.]

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